ORBIT 6

A Publication of the Ontario Institute
for Studies in Education

Ideas about Teaching and Learning

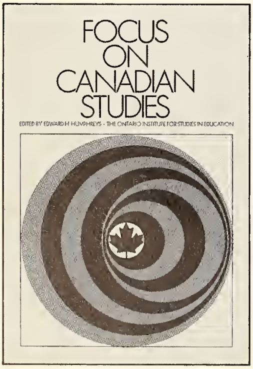
Volume 2, No. 1/February 1971

OISE Publications from Preschoolers to Poets

Marian L. Worthen
Editorial Division/OISE

Time was when the Institute's publication program meant five or six books a year, but this is not so any more. Research and development activities are coming above ground, and the result is a spate of publications that Sales and Promotion can hardly keep abreast of. They're not ivory tower stuff, either; they're relevant materials for the educational community.

Take *What Culture? What Heritage?* and *Focus on Canadian Studies.* With all the current emphasis on Canadian studies, these books are both basic and timely. A. B. Hodgetts' National History Project report (*What Culture? What Heritage?*) examines the strengths and weaknesses of present-day Canadian studies courses and does so with the immediacy of a documentary film. *Focus on Canadian Studies* discusses ways in which the various disciplines can further studies of this country. Both books were featured at the November Conference of the Ontario Association for Curriculum Development. *What Culture? What Heritage?* formed the backbone of the address given by keynote speaker Dr. Jean-Louis Gagnon, Director General of Information Canada.


FOCUS ON CANADIAN STUDIES
EDITED BY EDWARD H HUMPHREYS · THE ONTARIO INSTITUTE FOR STUDIES IN EDUCATION

Speaking of OISE 'best-sellers,' *Ten Years in a Box* is back. Of course, it is not confined to events in Canada; it touches on life in the thirties just about everywhere. A flexible treasure chest, it can be used at any level, for any purpose. For instance, a university professor of Russian history used the Box as a guide for making a similar collection of Russian memorabilia. At present, *Ten Years in a Box* is priced at $50 in Ontario. There's also a book about the Box compiled by David Stansfield and Anthony Barton, the two fellows who dreamed up the Box. Its title is *The 1930s Multi-Media Kit: A Report on Its Use in Schools,* and it documents the experimental use of the Box in two hundred Ontario schools.

Two of today's most 'in' topics are psychology and film, and OISE is holding its own with new books in both fields. In psychology, there is *Problems in the Teaching of Young Children,* edited by Andrew Biemiller of the Institute of Child Study. It is of special interest to teachers in nursery and elementary schools, and its contributors are specialists in the developmental learning processes of young children. One significant finding is that many of the teaching approaches previously developed as compensatory education for deprived children are now considered equally valuable for those with more privileged backgrounds. *Problems in the Teaching of Young Children* is an up-to-date commentary on early education. Incidentally, the cover girl is the five-year-old daughter of designer Helmut Weyerstrahs.

Another book of special interest to educational psychologists is *Matching Models in Education* by David Hunt, which 'describes models to coordinate student characteristics with educational environments. The relation between a student and the educational environment may be viewed in terms of how well they are matched for certain purposes.' *Matching Models* deals with both classroom and teacher-training situations.

Film is the subject of two new OISE publications. *Experiments with Film in the Art Classroom* illustrates the potential value of film in the art program of secondary schools. It presents five experiments with film that were conducted in art classes in Ontario high schools. The objective was to recapture in the adolescent the creativity of the young child. *The Uses of Film in the Teaching of English,* which is now in preparation, discusses film as an art form and also its supplementary role in the teaching of English. It includes practical lesson plans, as well as detailed studies of films, many of which were produced by the National Film Board.

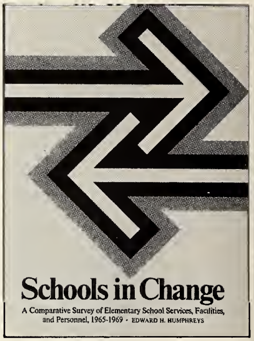
In imaginative sound recordings, Earle Toppings has produced a second tape series, *Canadian Writers on Tape*. This time he interviews six Canadian novelists: Morley Callaghan, Hugh Garner, Margaret Laurence, Hugh MacLennan, Mordecai Richler, and Sinclair Ross. These writers talk about their life and work in separate half-hour conversations. Margaret Laurence says of her novel *The Stone Angel*, 'The whole wellspring of the book is a sort of celebration of life. Which I think almost every novel is . . . because although I think this is a terrifying world we live in, the act of writing itself is almost an act of faith, almost an act of hope. And in a profound sense it's a kind of celebration of life. It's really saying, at the heart of it, life is very much worth living. And for God's sake let's make of it what we can.' These half-hour interviews are available on reel-to-reel tape: $6 each (complete set, $36). They are also on cassettes: $6 each (complete set, $18). There are two authors per cassette: Callaghan/Garner (No. 1); Laurence/MacLennan (No. 2); Richler/Ross (No. 3).

In our first recorded series, *Canadian Poets on Tape,* Al Purdy, Dorothy Livesay, Raymond Souster, Eli Mandel, Irving Layton, Miriam Waddington, Earle Birney, F. R. Scott, and Gwendolyn MacEwen talked about the making of their poetry and read poems of interest to students. A tenth poet has since been added: James Reaney, who is also well known as a playwright. *Canadian Poets on Tape* is also available both on reel-to-reel tape and on cassettes: Birney/Layton (No. 1); Livesay/MacEwen (No. 2); Mandel/Purdy (No. 3); Scott/Souster (No. 4); Waddington/Reaney (No. 5). Tapes are now $6 each ($60 a set). Cassettes are $6 each ($30 a set). *Writers* and *Poets on Tape* are of great value to high school and college students and teachers. It is a rare privilege to hear a poet or novelist talk about his own life and work.

Another addition to the field of English is *Rhetoric: A Unified Approach to English Curricula*. Designed for both teacher and student, it contains detailed course outlines and lesson plans, and is useful at elementary, secondary, and university levels. In the preparation of his book, editor Victor Whatton (Department of Education) interviewed hundreds of teachers at all levels, as well as noted linguists and rhetoricians such as Neil Postman, Martin Joos, and David Holbrook.

Learning to Read — Insights for Educators continues to be popular. These lectures, delivered by Ruth Strang, a reading expert from Teachers College, Columbia University, are intended to give a sense of structure and unity to the teaching of reading.

There's a lot of talk about the restructuring of school units. Have schools become larger since board consolidation began in Ontario? Have teachers' facilities improved? Are special classes or services available to all children who need them? These and other pertinent questions are examined in *Schools in Change: A Comparative Survey of Elementary School Facilities, Personnel, and Services, 1965-1969,* by Edward Humphreys.


Schools in Change
A Comparative Survey of Elementary School Services, Facilities, and Personnel, 1965-1969 · EDWARD H. HUMPHREYS

The OISE Library's Reference and Information Services produced *Nongrading* (now revised) as the first publication in their series of bibliographies. Now they've come up with *Open Plan* (No. 2) – which covers teaching and facilities in an open plan school – and *Differentiated Staffing* (No. 3) – which deals with the effective utilization of professional staff. These annotated bibliographies include books, research reports, theses, journal articles, films, and tapes.

All the preceding publications can be ordered from Publications Sales, OISE, 252 Bloor Street West, Toronto 5. Some of our publications have changed hands. Remember the seven science units that were so successful in the Ontario Teachers' Federation workshops? These units have now been taken over completely by the Ontario Teachers' Federation and can be purchased from OTF. *The New Approach to Music,* which is a real winner, has been published by Holt, Rinehart, & Winston of Canada.

By the way, have you remembered to renew your subscription to *Orbit?* The price is still $3 for five issues per year.

Forthcoming Events

February 20
'Supervision is Leadership'—a five-seminar series sponsored by the Ontario Institute for Studies in Education. To be held at OISE, 252 Bloor Street West, Toronto, on the following dates: February 20, 23, 25, March 2, and 4. (At 8:30 a.m.)

February 20
'Workshop on Practical Alternatives in Secondary Education'—sponsored by the Graduate Students' Association, OISE. To be held at OISE.

March 5-6
'The Canadianization of Post-Secondary Education'—sponsored by the Graduate Students' Association, OISE, in cooperation with the Committee for an Independent Canada. To be held at OISE.

March 11-13
'Conference on Bilingualism in Education'—sponsored by the Modern Language Center, Department of Curriculum, OISE. To be held at OISE, 252 Bloor St. W., Toronto. Sessions:
March 11 — 5:30 p.m. to 7:30 p.m.
March 12 — 9:00 a.m. to 6:00 p.m.
March 13 — 9:00 a.m. to 12:30 p.m.

April 29 - May 1
'A Symposium on Teacher Education'—sponsored by the Teacher Education Committee, O.T.F. To be held at OISE, 252 Bloor St. W., Toronto. April 29—12:00 noon—to May 1—12:00 noon)

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Audience: *Orbit* is published by the Ontario Institute for Studies in Education for everybody involved in or concerned with education.
Content: *Orbit* features information about educational research and development and, in addition to discussing work carried out by OISE and schools across Ontario, draws on material from other Canadian provinces and other countries. Les articles qui intéressent surtout les francophones paraissent en français.

Contributions: We should be glad to receive from readers articles about educational practice, criticisms of past issues of *Orbit*, and suggestions for future issues. Before submitting full-length articles, for which an honorarium will normally be paid, a preliminary letter should be sent to the editor.

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Please enclose a check or money order payable to the Ontario Institute for Studies in Education.

THE PERCEPTUALLY HANDICAPPED CHILD

Some problems of diagnosis and treatment

H. Silverman and K. G. O'Bryan
Department of Applied Psychology/OISE
and M. Langer/University of Waterloo

A tracing task using a mirrored instrument designed to improve binocular and eye-hand coordination

What is perceptual handicap? How is it associated with brain damage? How does it differ from a learning disability?

It would be nice to know! Not that there haven't been many attempts to answer these questions, but all that most people have so far been able to come up with are other descriptive labels – perceptual-motor handicap, brain-injured child, minimal brain dysfunction, you name it. And the result has been to breed even more confusion.

Yet if the fundamental nature of a perceptual handicap and its relationship to brain damage have still to be understood, the outward effects are well enough known – especially to kindergarten and elementary school teachers. Following are some of the behavioral symptoms commonly said to occur in a child we'll describe (in this article) as perceptually handicapped.

It's very likely that he'll be hyperactive, unable to settle for more than a few moments, constantly shifting from seat to seat and from task to task.

He will have a *very* short attention span, and display extreme ranges of emotions. He will show a limited tolerance for frustration, and will tax his teacher's tolerance to the limit. He is likely to explode into crying for almost no apparent reason, and just as likely to break into laughter or giddy activity, becoming high abruptly and without inhibition.

He is almost always suffering from, or surviving under, a variety of difficulties, including poor spatial orientation, distorted perception of foreground and background, impaired distance judgment, and form confusions. He is unlikely to be able to copy information from texts or the blackboard, or to integrate information from different senses. You'll see him make frequent reversals and transpositions in reading and writing letters, words, and numbers. He'll likely be prey to short- and long-term memory problems as well as being unable to plan, organize, or complete required school work. Then, it's a good bet he'll walk into, trip, upset, or bump into people, because he's a child with gross and fine motor control problems.

All in all, the child who meets this general description has a real problem and is a real problem to the teacher. He'll take more of her time, destroy more of her lessons, create more distraction, and cause more headaches for her than any large group of normal children. And it is when the teacher comes to realize that he is not a member of that faceless group of 'normal' children that the confusion about the perceptual handicap problem really becomes apparent.

Clearly, the classroom teacher cannot, except under very special circumstances, continue to allow the handicapped child to compete more for her attention than all the rest of the class. Generally, her first move will be to consult the principal of the school and he will refer the problem to the school board's psychological services, thus taking a step towards relieving the teacher of her difficulties – but not necessarily towards relieving the child of his.

Diagnosis

What happens on referral? At the risk of angering the school psychological services, the authors have to argue that present diagnostic services are hopelessly uninformed on several counts.

First of all, most psychologists are generalists, handling a wide range of assessment tasks (IQ, emotional disturbance, personality, achievement, etc.); few are sufficiently well trained to differentiate the perceptually handicapped child from other children with psychological-behavioral symptoms that look similar. Second, the support for the psychologists in terms of well-tested standard measures of perceptual handicap is very limited indeed. Specifically, there is no reliable, valid test of perceptual handicap, and those less-than-adequate tests which are available are based not on general criteria but on one of the many theories of *remediation* of the problem. They make a kind of self-fulfilling prophecy in that their developers suggest a treatment for the problem and then devise tests for diagnosing candidates for the treatment. This leaves the school psychologist in the uncomfortable position of flying his diagnostic instruments by the seat of his clinical pants.

So why bother? Well, the child *is* a *problem*. Clinical-pants-flying may be better than being grounded (though perhaps potentially more dangerous), and there are some approaches to diagnosis which, if not authenticated, are at least widely accepted.

The better-known methods of perceptual handicap diagnosis include the performance tasks on the Wechsler Intelligence Scale for Children (WISC), an instrument which may measure IQ, but not perceptual handicap. Although the WISC has long been the mainstay of the clinical psychologist, its relevance to perceptual handicap has been questioned both in the research literature and in the authors' own studies. The child who can't reproduce printed patterns of colors with the blocks provided is almost always suspected of minimal brain damage – because some rather doubtfully controlled and designed studies have linked performance on this and other sub-tests with perceptual handicap. While these studies have not been directly replicated, our own data indicate that the supposed relationship does not exist. As Cohen points out, you really don't know what the block design scores indicate. In any case, a number of other psychological variables can produce very similar performances on the WISC tests. Be that as it may, any 'soft' signs of brain damage or perceptual handicap will almost certainly be followed by the Bender Gestalt Test for Young Children.

The Bender Gestalt Test (Koppitz, 1964) is being used to diagnose perceptual dysfunction. The test, however, provides an analysis of *perceptual-motor performance* as revealed by the child's ability to copy designs. Perceptual-motor performance is a much more complex integration of functions than is perception. The process involved in perceptual-motor performance includes: (1) seeing an object, (2) understanding what has been seen, (3) translating the perception into action, and (4) the actual motor act; that is, the coordination and integration of fine motor skills. A child may have no problem in visual perception but have difficulty in the motor act of expressing his perception of the designs. Yet he is likely to be diagnosed as having a visual perceptual difficulty, and it will be suggested that he be given perceptual remediation when in fact he needs remediation of a different type.

The Frostig Developmental Task of Visual Potential, usually the clincher, attempts to reduce the difficulty of the diagnosis but may actually add to the confusion. It, too, relies heavily on intellectual and motor performance not necessarily related to perceptual handicap. So, the clinician must interpret sub-tests in which fine eye-hand coordination and fine motor control are necessary for success. How is he to tell whether a child's performance indicates perceptual handicap, clumsiness, or lack of motor development? Frankly, if he adheres to the suggested method of administering the test, he can't really tell. However, he adds his interpretation of the Frostig to the other information he's gathered from his other unvalidated tests and places his bet.

Still another diagnostic technique is to examine the brain itself. Nearly everyone has heard of the electroencephalogram (EEG) – a device for measuring brain waves. Regrettably, the EEG, despite its aura of medical respectability, is not much more useful than the psychological tests. It may be in time, as it becomes more refined and the effects of localized lesions become better known. But at present its usefulness is limited by its inability to provide information on the location or extent of the lesion, or, often, to indicate whether there is in fact minimal brain damage.

Trampoline exercises encourage body control and coordination

Follow-the-leader on walking boards proves to be a tougher task for the leader

A variation of the wheelbarrow exercise designed to improve large muscle coordination

Generally, diagnosis all boils down to the school psychologist's decision after adding up all his evidence – in other words, to a best guess, a judgment based on experience, the referral information, and the test results. But in view of our present state of knowledge, what else is there to do?

Remedial Treatment

If he is guessed to be perceptually handicapped, the child is then added to the waiting list and is eventually admitted to a special classroom, usually with approximately ten to twelve other similarly *diagnosed* children, most of them boys, most of them ranging in age from seven through twelve. In some instances, even though he is often above average in intelligence, he will be placed in a composite group with retarded children or with children whose behavioral problems result from a different cause. So the situation begins to get very complex. And even if he is put in a class specifically designed for the perceptually handicapped, there is still no guarantee that the program will meet his needs because the treatment offered will usually consist of one of three well-known but poorly validated methods, or a combination of them.

Recent studies have shown that the beginning aspects of reading are closely related to perceptual abilities. However, although there seems to be theoretical and empirical support for the existence of a relationship between perceptual-motor training and improvement in reading, the assumptions underlying the treatment programs generally offered have not been submitted to a systematic evaluation in the classroom. Rather, the programs have been adopted with enthusiasm in situations in which the only criteria of success have been the subjective judgments of the teachers themselves.

Do they work or don't they? No one *really* knows. People believe they do, think they do, or just plain hope they do. How do they work? Also very unclear! What are they? That we can answer. They are usually based on theories of Kephart, Frostig, and Getman which have not yet been tested and substantiated as fact. Although each takes a different theoretical position, there is some similarity in their methods, and most special education programs use elements of all three.

Kephart's techniques are based on the theory that the development of children is sequential and continuous and that later and complex learning is built upon, and partly composed of, earlier learning. The child learns through making primitive responses (grasping, releasing, etc.) and proceeds by a series of steps to the development of thought processes and complex problem solving. Kephart is convinced that no step in the progression can be missed without a disability resulting. Therefore, good motor development is essential for the complex and elaborate perceptual learning required to engage in full-scale thought and problem solving.

Accordingly, the Kephart program tries to train the child in a progression of activities from early motor coordination to perceptual organization and through this to develop the perceptual motor skills he will need to learn such skills as reading, writing, and spelling. Kephart would answer 'yes' if asked whether trampolines, balance boards, mazes, and the like are useful aids in the remediation of perceptual handicaps. But no one, not even Kephart, has thoroughly tested either his theoretical position or the effects of his remedial techniques.

Another type of training program is that developed by Frostig (1964), who stresses perceptual training through paper-and-pencil tasks. Inabilities in any of the areas tested may be remediated by specially prepared paper-and-pencil exercises specific to the inability. Frostig feels that these procedures are useful in the remediation of perceptual difficulties in which the problem is in the integration of visual information.

Getman's methods form the third general approach to perceptual handicap remediation. He suggests developing in the child the efficiency of his eye-movement control systems from the rather esoteric viewpoint of binocular coordination, and also his capacity for eye-hand coordination, pursuit and targetting eye-fixations, differentiating eye movements from general head and body movements, and smooth eye-hand-body coordination. If all that seems rather hairy, it boils down to Getman's conviction that the interaction of vision, the world, and the body is a key to the development of accurate spatial relations, and to the integration of sight, hearing, and feeling. All of these he considers necessary for the efficient functioning of thought and problem solving. Getman's treatment, then, includes balancing, gross motor activities, form-perception tasks, copying, and drawing.

On the surface, all these programs seem fairly useful, bearing in mind the symptoms of the child described earlier in the article; but all rest on some assumptions that are not altogether proven.

Each assumes:
1. There is an interrelationship between the various sensory and motor systems and gross, fine, and oculo-motor factors influence perception and its development.
2. It is necessary for a child to have reached a certain level of maturity in his perceptual-motor development for him to achieve his learning potential.
3. Perceptual-motor development is closely related to school achievement.
4. Perceptual and motor abilities are partly dependent on learning – so that a systematic program of perceptual and motor activity will improve the general level of perceptual and motor ability and this, in turn, will be reflected in improved reading, writing, and spelling skills.

A Current Research Project

When the effects of relocating the child in a special class – together with all the attendant problems of transportation, special equipment, and effects on self-concept, parental expectations, peer relations, and future prospects – are considered, it seems to us that the understanding of perceptual handicap, the diagnostic techniques, and the training and remedial programs have been inadequately researched and left far too open to chance effects rather than real results. Of course, *something* has to be done to help children displaying perceptual handicap symptoms, and – what is equally important – relief has to be provided for teachers with problem children in their classrooms. We suggest, however, that present methods of diagnosis and the treatment procedures that follow must *not* be looked upon as adequate. Nor should they be expected to produce results out of proportion to their present level of sophistication. We also suggest that the present approaches can and should be thoroughly investigated.

To this end, we have set up a project, funded by OISE and supported by several county school boards, which involves the University of Toronto School of Physical and Health Education and the Chedoake Child and Family Centre of Hamilton in the diagnosis and treatment of perceptual handicap in boys between seven and ten years of age.

Estimates of the percentage of perceptually handicapped children in this age group range from ten to twenty-five percent, with boys outnumbering girls by about nine to one. As it would have been impossible for us to test every boy between seven and ten in the school systems participating in our project, we devised a list of criteria based on the symptoms described earlier in the article, then requested that the special services consultant of each board, in cooperation with the classroom teachers and principals, provide us with a list of probable perceptual-handicap cases. Since we were dealing only with likely cases, we expected to identify as perceptually handicapped close to forty percent of those referred to us. In all, 325 boys were on the initial referral lists.

Because we wanted to test the effectiveness of the training program on boys who clearly displayed 'classical' symptoms of perceptual handicap, we devised a battery of diagnostic tests and included among them all the best-known measures. More than seven hours of testing went into this battery and we expected to be able to provide evidence on the incidence, quality, extent, and type of perceptual handicap. To be included in our treatment group, a child had to be identified as perceptually handicapped on three-quarters of the tests. Further data were obtained from medical and pediatric reports and a full optometric analysis was available. We expected to find lots of perceptually handicapped children and didn't. Less than fifteen percent of the 325 referrals met our criterion, and there was little evidence of the existence of the problem in the majority of the remainder. On an estimated population basis, approximately one percent of the boys in these school districts were demonstrably perceptually handicapped to the extent that special treatment could be justified. The few who showed limited symptoms likely suffer very little from their 'handicap.' In any case, dislocation or even specific identification could not be justified.

Well, where had all the problems gone? A large number were normal, boisterous, mischievous kids. Some were emotionally disturbed. Others had immigrant parents who spoke little or no English. Still others suffered some physical or medical impairment distinct from perceptual handicap. Yet each had been referred to us, by those closest to him educationally, as likely to be perceptually handicapped.

Despite the surprisingly low incidence of the problem, we proceeded with the boys we found, randomly assigning them to three groups. Those in the first group were given a typical treatment program incorporating Kephart, Frostig, and Getman methods; those in the second group were placed in a high-interest, warm, and friendly environment; those in the third group were allowed to remain in their home classrooms to see if their problems would go away of their own accord as they matured and perhaps compensated for their disabilities. There were equal numbers in each group.

After selection, each child was tested on a series of reading, writing, spelling, and intellectual tasks, providing us with data in addition to the already very large inventory of perceptual, optometric, medical, and behavioral data already collected on him. Impressions of his behavior were collected from his teachers and parents as well.

The program has now been going for close to a year. Twice a week the first two groups are given highly intensive treatments by trained psychologists, physical educators, and optometrists. The ratio of teachers to students is usually one to three. The aim, of course, is to see whether anything works, in what way, how much, and for how long.

Since we retest at six-month intervals, we don't have much information available at this stage. We do, however, have a few rather interesting findings which in turn cast a little light on the diagnosis and treatment of the problem.

We found no test of the popular variety doing a really good predictive job in diagnosing perceptual handicap. Our most consistent measure was a marble-board figure-ground test which, if standardized and validated further, could prove valuable. The WISC sub-tests (not used for diagnosis but available for use as a measure of general intelligence) showed no predictive ability and did not relate to the problem. It does seem likely, though, that a composite diagnostic package might be developed using key items drawn from a number of the tests used, thus reducing the very costly diagnosis procedure.

The type, scope, and characteristics of perceptual handicap varied greatly with each child. That is, it was very difficult to point to any one child and say 'He is typical.' It follows that to be successful, treatment might need to be at the individual profile level, with attempts made to treat specific disabilities.

There has not been sufficient time so far for the treatments to produce significant results, but they have led to the observation of a very interesting phenomenon. By far the biggest effects have been in the attitudes of the parents and teachers towards children in the two treatment groups. They have consistently noted and reported improvement in many behaviors of the children. The boys are said to be better in some aspects of school work and in discipline, coordination, acceptable activity, attention, and cooperativeness. Yet only in isolated and non-significant amounts have these improvements been reflected in our test results collected under controlled conditions. It seems that a strange kind of reverse effect is occurring. Perhaps the expectation of good results has led the parents and teachers to imagine improvements in the day-to-day performance of the child. Behavior which is probably little different from that prior to treatment (and at that time viewed negatively by the adult) may have lost much of its negative aspect now that it can be perceived as a problem beyond the control and immediate responsibility of the adult. Thus it begins to be regarded as recovery or as 'improvement' in behavior. This may well explain why treatments of perceptually handicapped children are commonly thought to have short-lived results and it strengthens our doubts that the Kephart- or Frostig-type treatments have either real or lasting effects on perceptual-motor coordination or subsequent school achievement.

At present, the situation remains obscure, although we should have more definite things to say about the effectiveness of the treatments after another year has passed. We are now proceeding to refine our diagnostic battery with the prospect of testing and validating it in the field in cooperation with the OISE development center in Peterborough.

Finally, we do suggest one hopeful thought – it may soon become apparent that special class treatment of perceptually handicapped children is not justifiable. It is possible that on-site special treatment provided by a consultant working from individually designed programs could be cheaper, less disruptive, and more effective than present methods. We consider the provision of these programs will be a direct result of improved specific diagnosis and will shortly report our findings in this area.

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1. An experiment in an O-level chemistry class

2. Finding out what happens to copper when it is heated in a vacuum

3. Nuffield Lodge, the headquarters of the Nuffield Foundation in London

The Nuffield Foundation and Educational Reform

William Anderson

Head of Publications
The Nuffield Foundation
Science Teaching Project

In many areas of education the name of the Nuffield Foundation is now firmly linked with the cause of reforming the curriculum. How has this come about? And have the effects so far been good? For a number of years I have been too closely linked to one of its projects to give an objective answer to the second question, but I hope that in describing how the Foundation came to be involved in education some of its aims may become clear.

First of all I must say something about the Foundation itself. It is housed in an elegant neoclassical villa built in about 1830 by the architect Decimus Burton, who was responsible for several famous buildings in or near London – among them the Ionic Screen at Hyde Park, the Palm House at Kew Gardens, and the Athenaeum Club. Beautiful gardens slope down from it to a canal, on the other side of which lie Regent's Park and the London Zoo. The atmosphere there seems far removed from the source of the wealth on which the Foundation was established – the motor industry. Like numbers of similar charitable organizations – whether the Ford Motor Company in the United States or the Volkswagen Stiftung in West Germany – the Nuffield Foundation is one of the more benign side-effects of the coming of the motor car.

Lord Nuffield, a motor manufacturer and philanthropist, built up his great Morris Motor Company from a bicycle shop he opened in the Oxford of 1893. By the time he set up the Foundation in 1943, he had already given large sums to medical causes, universities, servicemen's hostels, and other charitable undertakings, but it is the work of the Foundation that has carried his name farthest across the world. Besides education, the Foundation's interests include grants for medical research, social research and experimentation, and the care of old people, grants for projects in Commonwealth countries, and a fellowships and scholarships program. Director of the Foundation is Brian Young, a former headmaster of the well-known public school, Charterhouse, who will shortly be leaving to become chairman of the Independent Television Authority. The new director will be Clifford Butler, Professor of Physics at Imperial College, London. The director and the assistant directors, who look after various sides of the Foundation's activities, are responsible to a board of trustees.

The way in which the Foundation has most affected the educational system is through developing new curricula for various subjects. That these subjects cover mainly the sciences and languages reflects to a certain extent the economic needs of the United Kingdom for more and better trained scientists and technologists and for increased trade and understanding with other countries.

The Foundation set out to give teachers of outstanding ability the time and facilities to undertake a complete reappraisal of the methods used in teaching their particular subjects. These teachers brought together teams, who developed materials which were put on trial in volunteer schools and were then revised in the light of these trials. The materials are not textbooks in the old sense, but integrated sets of teachers' guides, students' readers and workbooks, visual aids, including film loops, and other materials. By administering these various projects itself, the Foundation managed to secure some teachers not only time but also far greater freedom of action and opportunity for original experiment than might have been the case had the direction been left to professional bodies. The next stage was to find means of publishing the materials that had been developed and making them generally available.

In the case of the Nuffield Science Teaching Project, the Foundation financed the publication of the first materials itself. Acting through the Longmans group and Penguin Books, it brought out nearly two hundred titles. This arrangement was particularly fruitful, as it allowed members of the project teams to tailor the design of the books exactly to the requirements of their projects and to make experiments which were bolder than an educational publisher acting on his own would normally allow. One example is the students' background books in chemistry, for which there was no precedent in chemistry teaching. There are nearly forty titles in this series and, in this particular case, the books had to create their own market. This they have done. The Foundation has issued later publications on a more conventional royalty basis, but the initial example of experiment has not been abandoned.

The projects in the Foundation's school curriculum program, which are described in the following sections of this article, are the Science Teaching Project, the Junior Mathematics Project, the Language Teaching Project, the School Classics Project, the Humanities Curriculum Project, the Project in Linguistics and English Teaching, and the Resources for Learning Project. Although these projects all differ considerably in points of detail, they share many of the same objectives and have common organizational patterns. Each of them grew from the concern of teachers in all parts of the country with the need to overhaul the whole approach to teaching in classroom and laboratory according to recent advances in knowledge, current views of the nature of learning, and the new emphasis on the active part the student should play in the learning process. Thus, in most of the science projects, only expense or danger stop the student from doing every experiment himself. The very nature of the material and the way in which it is presented force him to progress by asking questions and develop in him the spirit of enquiry.

At the same time that the organizers and their fellow teachers were working towards giving new life to the presentation of their subject in the classroom, they were also busy devising examinations. These new examinations try to make sure that both testing and teaching help the student to gain a working understanding of the subject rather than cram him with facts that are unrelated to experience.

Science Teaching Project
Work on the projects in this series began in 1962. By the summer of 1966 the first ordinary-level materials in biology, chemistry, and physics were published, arousing an interest that far exceeded expectations. One survey has shown that over 50 percent of the grammar schools (which are roughly equivalent to Canadian collegiates) have taken on some part of this ordinary-level program.

The other projects vary widely in the age groups for which they are intended, but they now cover every age from five, at which the junior science materials begin, to eighteen, or university entrance, at which the advanced-level materials end. The project that may well have the most exciting impact in the long term is in secondary science. Materials for it are in preparation and will be published by the Longmans group in 1971. These materials are designed for students who will not necessarily take a school-leaving exam, and who need to be specially provided for. Here students are not presented with science as a set of rules that must be learnt. Instead they are faced with familiar situations and objects from their daily life, and these are made the starting points for using scientific methods. For these students, this is not an introduction to science but in many cases the only science they will ever be taught. It provides, in fact, a means of making the dangers and splendors of a technological society intelligible to those who are most likely to be alienated by it.

The projects already published or now in preparation are shown below.

Project and Date of Publication	Age Range	Canadian Publisher
Junior science, 1967	5 — 10	Science Research Associates (Canada) Ltd.
Combined science, 1970	11 — 13	Longman Canada Ltd.
O-level biology, 1966	11 — 16	Longman Canada Ltd.
O-level chemistry, 1966	11 — 16	Longman Canada Ltd.
O-level physics, 1966	11 — 16	Longman Canada Ltd.
Secondary science, 1971	13 — 16	Longman Canada Ltd.
A-level biology, 1970	16 — 18	Longman Canada Ltd.
A-level chemistry, 1970	16 — 18	Longman Canada Ltd.
A-level physical science, 1971	16 — 18	Longman Canada Ltd.
A-level physics, 1971	16 — 18	Longman Canada Ltd.

Note: In Canada, O-level is roughly equivalent to grade 12/13, and A-level to first-year university.

All sections of the Science Teaching Project were transferred to the Centre for Science Education at the Chelsea College of Science and Technology in August 1967. Further information may be obtained from Professor K. W. Keohane at the Centre, Bridges Place, London SW6.

Junior Mathematics Project
This project is for children between five and thirteen years of age. It is intended to help students to connect many aspects of the world around them, to introduce them gradually to the process of abstract thinking, and to foster in them a critical, logical, and creative turn of mind. The publications consist of guides for teachers, which are particularly attractively produced and won the designer, Ivan Dodd, an important award.

The materials in the Junior Mathematics Project are published in the U.K. by John Murray and W. & R. Chambers, in consortium, and they have contracted with John Wiley & Sons Inc. of New York for the American rights. Several films explain the work and aims of the project. Further information can be obtained from the Project Organizer, Dr. G. Mathews, 12 Upper Belgrave Street, London SW1.

Language Teaching Project
This project is mainly concerned with the preparation of courses in French for students between the ages of eight and thirteen, and in German, Spanish, and Russian for students between the ages of eleven and thirteen. The object is to develop graded teaching materials for introductory audiovisual courses, using wherever possible recent research findings and modern teaching techniques. The languages are presented to students as a means of communication. The first stage of each course is purely oral; the later stages introduce reading, writing, and composition, in that order.

Following the testing of draft materials in association with the Schools Council French Pilot Scheme, the first stage of the French course, parts A and B, were published in the United Kingdom by E. J. Arnold & Son in 1966. Stage 2 was published in 1967, and Stage 3 in 1968. Stage 4 is currently being tested and will be published shortly.

E. J. Arnold is also publishing the German course. The first stage of these materials was published in September 1968.

The first stages of the Spanish and Russian courses were published in September 1967, with Spanish 2A and Russian 2 appearing in May 1968. Macmillan is publishing the Spanish materials and, with Lund Humphries as co-publisher, the Russian.

A list of the project's publications is available from the Publications Officer, Nuffield/Schools Council Modern Languages Project, Micklegate House, Micklegate, York, YO1 IJ2.

School Classics Project
This project, which began at Cambridge University in 1966, is supported by both the Nuffield Foundation and the Schools Council. It has two aims: first, to devise a new approach to the early stages of teaching the Latin language, and second, to provide materials for non-linguistic courses in classical studies. The development work will continue to the present year.

The emphasis in the language material is upon the acquisition of reading skills, and the development of linguistic principles for this purpose is being carried out in close association with Dr. J. B. Wilkins, who is currently conducting a program of research at Queen Mary College, London, into the structures of Latin.

Seventy-four schools in England and Wales began classroom trials in September 1967. These were joined by a further twenty-two schools in 1968. Taken together, they provide a wide variety of educational and social environments. Most students range between eleven and thirteen years of age.

Students' printed materials will be accompanied by visual aids, tapes, and a teachers' manual. The books are being published by the Cambridge University Press.

Humanities Curriculum Project
The Humanities Curriculum Project (which was briefly described in the article 'Pupils into Students' in *Orbit 4*) is sponsored jointly by the Nuffield Foundation and the Schools Council. It was set up in 1967 to provide schools and teachers with courses based on the enquiry method, and is intended to cross the subject boundaries between English, history, geography, religious studies, and social studies.

Further information can be obtained from the director of the project, Mr. Lawrence Stenhouse, Philippa Fawcett College, 94-100 Leigham Court Road, London SW16.

Other Projects
Two other Nuffield projects remain to be described. The first is the Project in Linguistics and English Teaching under Professor M. A. K. Halliday, which is designed to help teachers of English overcome the problems of the traditional school approach to grammar. The papers for teachers, giving guidance on what practices are linguistically more desirable, are being published by the Longmans group. The second is the Resources for Learning Project, now directed by L. C. Taylor. The work of this project includes studying the ways of organizing work in schools so that the best possible use can be made both of new methods and equipment and of teacher's skills. The team has concentrated on programmed learning (using both books and machines), team teaching, the use of television and other aids, and the possibilities of increasing the amount of independent study by individuals, pairs, or groups, as opposed to usual class teaching.

Future Revisions
The work of the Nuffield Foundation in curriculum development is now diminishing. However, the task it set itself is being continued on a national scale by the Schools Council for the Curriculum and Examinations, a body set up partly by the Foundation and supported by local education authorities. One danger that was foreseen from the beginning was that these reformed methods would become the new orthodoxy. To counter this, it is planned to revise all these schemes periodically and test them for their continuing usefulness.

Ecology studies in a pool specially constructed for this purpose

French-Language Teaching Modules: a new approach to language-teaching materials

H. H. Stern and *Alice Weinrib*
Modern Language Center/OISE

Ray Elsass demonstrating one of the components of the weather module

Until very recently, language-teaching materials consisted mainly of *textbooks*, containing narratives, grammatical exposition, exercises, and a glossary. In addition, teachers had at their disposal other aids, such as readers, books of drills and exercises, song books, and so on. But the textbook was essential and central to the language program.

Since the mid-fifties, several attempts have been made to produce course materials which are not primarily book-based but present the basic content of the course on tapes, or on filmstrips with tapes, so that the student reads and writes less and listens and speaks more. The resulting materials are the so-called *audiolingual and audiovisual programs*. In this approach the book is entirely ancillary to the course.

Now also on the market are course materials combining the first and second approaches in one or several large kits which in extreme cases provide a complete and fully integrated program from the beginning to the end of a school language curriculum.[1]

All these programs are planned as comprehensive teaching sequences. They provide a syllabus, teaching materials, and methods, as well as a regular progression in the language concerned. Under ideal circumstances, their value is evident: in offering a gradual progression and a secure sequence, they can act as the teacher's daily companion throughout the length of the course. Good programs, clearly geared to the particular needs of groups of students, can make a substantial contribution to the improvement of language teaching. Conversely, bad or unsuitable programs can ruin the best of intentions. The importance of these course materials has been widely recognized by language teachers, and in recent years wherever reforms of language teaching have been planned, they have led to the introduction of such new course materials.

In Ontario, as elsewhere, the principal medium of innovation has been the development and introduction of sequential teaching programs which incorporate certain current pedagogical and linguistic theories. While these programs constitute a real advance and help teachers to give their French teaching a new and desirable emphasis, the majority have several weaknesses.

Some are based on a rigidly audiolingual approach to language teaching, which was very much in fashion around 1960 but which has since been subjected to severe criticism on both theoretical and practical grounds. Although teachers are on the whole pleased with them now, it is likely that after a few years one important feature of these programs, the massive amounts of repetition and monotonous structure drill, will be found to be a disadvantage.

Then, too, some which were produced in the States, France, and Great Britain do not take into account Canada's special situation. They present French as a foreign rather than a second language, and in so doing are ill suited to our Canadian situation.

Yet another weakness exists in the fact that most of these materials are teacher-based and cannot be adapted to meet the current demand for 'open' schools and individualized instruction. Nor can they be tailored to meet the varying needs of students that have arisen in Ontario because the constantly changing educational scene has made uncertain not only the length of time the student will study French but also the age at which he will start.

Teachers may also find it difficult to adapt these programs to their own needs. Most programs reflect a highly individual approach to teaching – usually that of its author. Such a style cannot always be duplicated, even if the teaching situation is similar to the one for which the program was developed.

Added to the relative inflexibility of these integrated programs is the high cost factor. The production of an integrated program requires enormous resources. If these are withdrawn, the effort loses its impetus. Moreover, the investment by the school board purchasing such a program is usually so large that a change cannot be contemplated, even if the program in use has become inappropriate.

In more general terms, any course or program is based on certain linguistic, psychological, and pedagogical presuppositions. If these never changed, the production of a good integrated program would indeed be a worthwhile goal. But teaching circumstances and our knowledge of linguistics and its application are constantly evolving. Consequently, the most carefully prepared programs, even when they are adjusted to specific student needs, can suddenly become inappropriate because of administrative changes, changes in the structure of the educational set-up, and new developments in linguistic, psychological, and pedagogical thinking.

In other curriculum areas we have begun to realize the varied nature of learning and the need for more individualized instruction. In language teaching, we have largely ignored individual differences in learning. Although these variations are a serious worry to language teachers, producers of language programs still tend to gloss over the differing rates of student progress.

If we accepted the fact that language learners have varying backgrounds, approach learning in varying ways, and progress at varying rates, we should soon see that the existing type of long sequential language program, however good in itself, has serious disadvantages. It is ill suited to the current demand in education for a more flexible, more student-initiated, educational process.

Modules
With these thoughts in mind, we have begun to experiment with a new concept of program development in modern languages which we call 'modules.'[2]
A module is a unit or kit, independent of existing programs, dealing with one specific aspect of learning a language. A module can present information on a given subject (e.g., on the culture of a region), teach a linguistic feature (e.g., the negative), or provide practice (e.g., in listening). Its format is flexible, but it must be clearly related to its purpose. In many cases, modules are likely to be offered as small multi-media kits. Some may be for use in class, others may be programmed for self-instruction or independent use. They can be addressed to a particular age and grade level or have application over a wide range. Instead of offering a fixed preordained progression, modules can be compiled into a 'bank' of units which can be used in whatever way they suit a particular course, teacher, or set of students.

Eventually, a bank of modules might be considered an alternative to an existing fixed sequential program. Up to now, the materials producer has presented the teacher with a large package deal, a fully furnished house with all its advantages and disadvantages. We believe that in the future one might well provide a teacher with independent teaching units from which he can construct his own house.

However, it will take a long time to develop a sufficient number of modules to offer the equivalent of a published program. What modules can do now or in the near future is to complement existing programs and make up for gaps and deficiencies without upsetting the pattern of the program. Teachers are, of course, quite accustomed to using supplementary materials, such as readers, records, visuals, games, and puzzles. In a way, these are not really too different from modules. Indeed, many of these supplementary materials fulfill the same role as modules or could easily be converted into them. What makes modules different is that they are not intended as additives, as short-lived novelties, or as a little sugaring on the pill of language learning.

Objectives
It is essential to define the objectives of each module in precise terms. These objectives should be related to the specified needs of students and programs. They should state what information or skill the student should have at the end of the module that he did not have before. However, we include among the possible objectives some lighthearted and general ones, such as giving enjoyment without necessarily adding a clearly defined didactic dosage.

Audience
A module should be directed to a specified audience. In defining the target audience for the modules we are developing at OISE, we have looked to the Ontario schools first and foremost, but this should not prevent the modules from being relevant outside the province. We have attempted to design modules for clearly specified groups in terms of age and level of knowledge; nonetheless, some modules might be used anywhere in a given program.

Research
An essential step in the production of the modules is the finding of source and resource materials. For instance, in preparing a module on French Canada, the principal research would consist of seeking out the relevant aspects, sources, and first-hand data that warrant inclusion. The sources and research that have gone into the preparation of each module would of course be clearly stated in the material accompanying it.

Evaluation
When the module has been produced in trial form, it should be subjected to the criticism of experienced persons. Then, in the pilot stage, it should be experimentally tested in the type of classroom for which it is intended. On the basis of this testing, it should again be evaluated and revised, and this revised version should then be produced in small numbers for further validation under normal classroom conditions. After yet a third revision, which gives it its final form, it should be ready for wide-scale sale and distribution.

Content
It was decided that the best way to determine the content of modules would be to ask teachers of French in Ontario what strengths and weaknesses they perceived in the programs they are presently using, and what modules would best make up for the deficiencies. To find an answer to this, we drew up a questionnaire, which was sent to a sample of teachers representative of the ten administrative regions in the province and the grades between 1 and 13 where French is taught.

Their replies to the questionnaire indicate that the modules most needed initially are those which increase student motivation and arouse interest in the French language and culture. Once a sufficient number of 'motivational' modules have been produced, the teacher could choose which modules to use according to the age and interests of the class. Some of the motivational modules might promote French-language activities by bringing to the classroom French-language games, skits, crossword puzzles, and so forth. The teachers surveyed also frequently requested modules relating to such festivals as Halloween, Christmas, and Easter, which could be used at the appropriate time of year, and ones including materials about French Canada, which would bring to the classroom French Canadian songs, information about festivals, people, places, and events. Such motivational modules should help to make the content of French classes more relevant and timely while relieving the teacher of some of the time-consuming job of gathering materials and information.

Example of a Module
French and French-Canadian radio provides a valuable source of listening materials often consisting of spontaneous and unscripted talk. Some teachers, of course, already bring taped radio features, such as news broadcasts, to the classroom. But the average student needs a good deal of preparation before he can make adequate use of this readily available source of spoken French; radio broadcasts are by no means easy for most students to follow. With this in mind, we have begun to plan several modules which will prepare the student for listening to French radio. In the more elementary radio modules, the listening component will be simulated and simplified radio features. In the more advanced ones, the recorded material will be based directly on the original broadcasts. A radio module might consist of the following items in a small kit:
1. A folder providing background information and guidance to French radio programs which are available in Canada, including an introduction to the stations, program timetables and guidance on where to find current listings, information about some programs, etc.
2. A booklet providing background information about the recorded material in the module. This could be information about the speaker and/or the subject of the module, including visuals such as diagrams, maps, or a filmstrip, where appropriate.
3. Recorded material on tape or cassette. This forms, of course, the heart of the radio module.
4. A full script of the recorded material.
5. A glossary of words and expressions, together with observations on language features to which attention should be drawn.

6. A teacher's and/or student's guide to the kit, including suggested uses of the kit.
7. A workbook with practice material and tests to be used only if the teacher wishes.

The content of the radio modules will be based on authentic radio programs. The topics covered might include:
Political news (e.g., Quebec 1970)
Non-political features (e.g., radio plays or stories)
Weather reports (summer, winter)
Sports reports (football, hockey, skiing)

We are at present working on modules on the weather. The preliminary research led to the collection of actual weather reports from French radio stations and of the meteorological information the listener would need to understand these reports, including one or two relatively elementary books on weather forecasting. From this preparatory research, we are finding what vocabulary and structures are needed to understand most weather reporting.

Several modules on the weather will be needed to lead students to an understanding of authentic weather reports. The first of these, which is now in preparation, contains the following simulated recorded weather forecast:
'Voici la météo pour le Canada:
En Colombie britannique: ensoleillé, plus chaud cet après-midi.
En Alberta: ensoleillé.
En Saskatchewan: ensoleillé, possibilité d'averses cet après-midi.
Au Manitoba: ensoleillé, possibilité d'averses en fin d'après-midi.
En Ontario: ensoleillé.
Au Québec: ensoleillé.
et Terre-Neuve: brume et possibilité d'orages.
Ici le Canada, ne quittez pas l'écoute.'[3]

Another part of this module consists of sheets with meteorological maps, such as the one illustrated, and a tape instructing students on how to identify the weather and temperature in different parts of Canada.

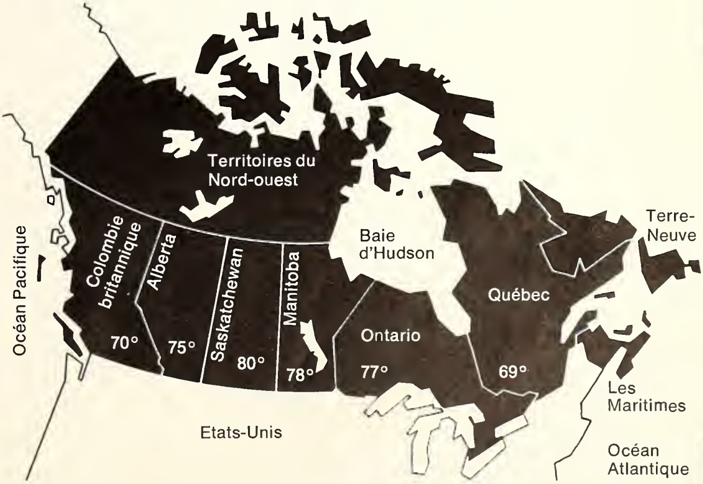
Other Modules
In the course of planning another module on French Canada, we have recorded interviews with a number of Quebec students in French. We hope to base at least one and perhaps several modules on the views of these young Québecois.

In a totally different vein, we are trying to meet the dearth of material for young children learning French at the kindergarten level with an activity-centered module based on an imaginary story and employing life-size figurines, stuffed animals, and cut outs.

As every module will only be put into final production after very stringent classroom testing, their completion is likely to take some time. While there is no shortage of material on the market right now, much of it is rapidly produced, under-researched, and under-tested. It is not our intention to add merely another novelty. What we hope is, first, to add something that is useful, but lacking in existing materials, and second, to encourage teachers with ideas, imagination, and the necessary research outlook to develop such modules themselves.

The success of the present project will depend a good deal on the cooperation of school boards and teachers of French willing to participate in the development and testing of these modules. We are also planning to produce modules in Russian and German later on. If you are a language teacher interested in the work we are doing on developing new language-teaching materials, you are invited to write or telephone us at the Modern Language Center, OISE.

Notes
1. For further information on existing French-language teaching materials, see H. H. Stern and A. Weinrib, 'New French Programs: A Consumer's Guide,' *Orbit 1* (February 1970), 8-11.
2. A module with a different definition was conceived by Earl W. Stevick for the Peace Corps language-training programs. His idea was to produce, 'for each area of intense interest, a course that presented the structure of the language within the limited vocabulary of that area.' Described in Earl W. Stevick, *The Modular Mousetrap* (Washington, D.C.: Foreign Service Institute, 1967).
3. The modules are being prepared and tested by Raymond Elsass, a project officer at OISE.



1

3

4

2

5

1. Students conducting their own seminar

2. Handling materials makes learning more relevant

3. Cooperatively planned units help to increase the number of available activities

4. Simple listening centers allow teachers to program directions and content in advance

5. Halls can often be utilized to provide additional work space

Some Notes on the Open Plan School

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The open plan is becoming an increasingly popular concept in Ontario's school construction. But can a change in architecture alter the learning program? Is the popularity of this change a response to bandwagon psychology, or is it truly an educational improvement? What new implications does this create for the preservice and inservice training of teachers? Are there common components of organization? How can we learn more about the most suitable methodologies for this new structure? And so the questions continue. For some, the answers seem quite complete. For others, there remains much to be learned.

On the one hand, it would seem most presumptuous to offer a set organizational prescription for open plan schools. On the other, one must realize that, while much remains to be learned about education, there is a sizable fund of knowledge that can offer guidelines for decision making. If this type of school is to truly reflect an understanding of child development and the principles of learning, all concerned must make a greater effort to unite theory and practice. This union should result in a more meaningful program based on clearly articulated aims and objectives that attend to philosophy, curriculum, and organization. An application of the 'known' is likely to facilitate the search for better ways.

The Student

If the premise is accepted that a major objective for students in the 'open' school is to gain independence by 'learning how to learn,' it must be conceded that they will need assistance in doing so. To learn responsibility, young people must be trusted to participate meaningfully in decisions about learning processes and course content. To learn respect, they must experience an atmosphere where respect is practiced. But while the truly open school provides an environment that encourages positive social interaction and a setting more conducive to flexibility and individualization, this by no means advocates a disorganized chaos that leaves students bewildered and without guidance. Careful planning is more essential than ever.

The Teacher

The open plan school has stimulated the need for revised teaching methodologies that encourage the teacher to shift his role from 'sage' to 'guide.' Also included in the new role is the responsibility for nurturing individual, flexible, and creative thought. As a catalyst for learning, the teacher must create a setting where students are motivated to search, question, and interact with the many dimensions of their environment.

Included in the many requirements for this visible kind of teaching, where teachers are no longer working within the confines of four walls, is an understanding of the characteristics of effective groups. Members of teaching teams must be able to accept a cooperative philosophy for their respective 'pods.' Inherent in this cooperation is the necessity to exhibit an awareness of and sensitivity to the feelings and thoughts of colleagues. Through a continued awareness of human relations and group dynamics, it is possible to build a competent and compatible team where members assist each other in understanding and acquiring the skills of lecturing, leading seminars, guiding tutorials, questioning, planning together, diagnosing, organizing, and evaluating. And while the open plan school has provided a setting that requires added patience, resources, and stamina, it has also presented teachers with a bold new challenge – the potential of which has yet to be seen.

The Principal

'As the principal, so goes the school' is an old cliché that is nowadays more relevant than ever. In this era, no single person is so influential. From the principal must come the vision, inspiration, support, and encouragement to carry teachers and students through the frustrations of finding a better way. At times he must be the umbrella that sheds the unfair criticism and undermining that frequently parallels the innovative process. When things go wrong, as surely they will on occasion, he becomes the scapegoat for the school, and sometimes even for the system. A most demanding role.

The success of the open plan school has, perhaps, yet to be demonstrated. While initial reactions generally appear to be quite favorable, the future will depend on a continuing search for improvement. No building design can create a program for students.

If it is to be, it is up to us.

How to Have a Funeral

O. Weininger
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It happens not too often – but often enough for teachers to know that when it does, just about everyone in the class is going to be affected.

Little Mary entered the classroom and, looking tired, red-eyed, and somewhat jittery, walked over to her desk, sat down, and started to cry. Of course the kids looked at her – and immediately some of them, maybe those who had had a hard morning, started to cry along with her. She did not say anything. She just sat there and wept. The teacher, a young woman, tried to console Mary, but she just sobbed all the harder and louder, then suddenly started to tear her workbooks.

Mary's mother died five days ago. Some of the children had heard about her death, but others had not. They really did not understand what this meant anyway. Six- and seven-year-olds do not deal with ideas like death in abstract ways. They say someone is dead, but then in their own mind and in their play they think and behave as if the person will come back again. There is no permanency about death. Fantasy and imagination take over where concepts and generalizations fail to take hold. Children have witnessed death through viewing TV and reading stories, for example, but death in the realm of fantasy (the media) is ameliorated and usually provides for the return of the dead in some form or other.

The teacher's concern is not only the child whose parent has died but also the way in which other children respond to this fact. By the way in which the teacher relates to the kids she will either accentuate their fears and force withdrawal or else start to help them, using and working with their feelings and emotions, and allow them to carry on their thinking, learning, and experiencing. Too often when a child experiences a painful emotion, the child not only turns off the feeling but turns *everything* off in an attempt never to experience anything so hurtful again. Learning can be one of the processes that gets turned off; for experiencing and feeling life, and learning about it, go hand in hand.

What about the child's limited thinking? What about the child's difficulty in forming generalizations? Most of the children in Mary's class told her that her mother was only sleeping, that she would wake up and come home soon; some told her that God had her mother with Him and as soon as the visit was over she would come home. Mary said she did not think these things were true, but went on to say that her mommy went away because she had been a bad girl.

Young children's thinking is so specific and self-centered that they think they are the target of events or the cause of them. They did something, said something, behaved in a certain way that caused the sad event. All kids are bad sometimes, and Mary was sure her mother went away because of this. Mary mourned her death in the only way she knew how, in a very specific and angry way. She could not know that her mother had no wish to leave. Mary felt angry and punished, and by ripping her workbook really showed the teacher how badly she felt about her own feelings.

The young teacher wisely encouraged the children to talk about death. She started the talk by referring to her own pet dog, who had recently died, and how sad she felt about that event. Some of the children joined her in conversation by talking about pets of their own that had died and how they not only felt sad, but also angry. The anger resulted because they had lost something or someone they loved.

The sequence of events is that of grief (anger), sadness (mourning), and then recovery (incorporation). The teacher's role is to help the child reach the final stage – recovery. Children are generally encouraged to express their feelings in culturally acceptable ways. They learn to express the attitudes their parents express or even that their parents tell them they *should* express. But we must not forget that one of the major components of personal grief is anger. The child who has lost someone he loves – from whom he has obtained satisfaction, warmth, strength, encouragement, and direction – is faced with the need to withdraw the strong feelings he has for that person and attach them to someone else. The process is a painful one, and the disruption of his feelings causes the child to feel anger, for he trusted that person, depended on him, and in fact invested a great deal in him – and now that person is 'dead and gone.' The child is angry for his death, for having been deserted.

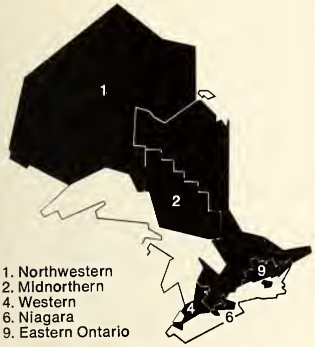
The anger can be short-lived because there is an opportunity to express the feeling – as did Mary when she ripped up her books – rather than burying it along with the dead person. The wise teacher does not try to stop the angry feelings; she encourages them even though they startle her because she knows that when anger is suppressed or when expressions of anger are followed by rebuke on the part of an adult, the child not only feels guilty for feeling angry but thinks he must be bad or that it is wrong of him to have such feelings in the first place.

The bereaved child will generally behave in certain ways after the mourning process has reached the stage of accepting the sadness. Some children start to withdraw, not only from their classmates but also from learning. Others become the teacher's shadow, always following the teacher, always trying to win approval, always trying to be good. In either case, such children have not gone through the grief-mourning-recovery process. They have stopped at the unexpressed grief-anger stage, and their behavior is that of a person who is depressed. Such children need encouragement to express their feelings, perhaps not in a verbal way, which may be too painful, but maybe in a drawing-painting-fingerpainting way. Sometimes even the dramatic acting out of a funeral may be helpful for the child.

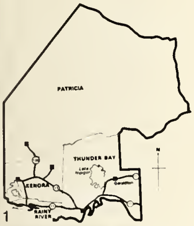
When the teacher has created a safe place for the child, has become a trusted individual to whom the child can begin to transfer some of his emotional burden, then the situation becomes one where the child can explore his world of personal feelings and experiences without fear of accusation and reprimand, and his thinking can progress. The child can begin to explore, ideationally, a world which has just injured him. He can hopefully move ahead to another thinking level containing new material which may be a bit anxiety-provoking for him. However, he has always the safety of the teacher's trusted person, someone who understands and will help him through the exploration of unknown and (perhaps) unsafe ideas, feelings, and experiences.

Now he can ask questions; now he can respond to his classmates' expressed thoughts, which may differ from his; now he can add them to his own in various creative ways. And as his thinking grows, his concepts expand. He moves out of one semi-darkness, perhaps into another, but with the knowledge that he is a growing and understanding part of the living world around him, able to deal in his own manner with the pain and anxiety often encountered in this world. Thinking has not been added to the funeral pyre.

OISE's Field Development Centres



Three of OISE's field development centres – Western Ontario, Niagara, and Trent Valley – have been in operation for almost eighteen months. Two of them – Northwestern and Midnorthern – were opened about six months ago. In this article, the head of each centre gives a brief outline of some of his centre's activities.



Northwestern Centre, *R. C. Harris*

Northwestern Centre was established in Thunder Bay to work with educators throughout the region. The climate and terrain of the area, ranging as they do from one extreme to the other, are indicative of the disparate elements to be found in northwestern Ontario. Not only is it difficult to make meaningful comparisons with southern Ontario, it is often equally difficult to compare places within the region itself, so varied are the conditions. The differences may be cultural, linguistic, environmental, attitudinal, or even educational, but they are very real.

One of the major problems facing the Centre is the tremendous size of the region – it extends over some 200,000 square miles and stretches more than 300 miles into each of two time zones. Almost any trip to a school division entails one or more nights on the road, and the cost of holding regional meetings is extremely high. Certainly this will affect the way in which an advisory council is established. The involvement of educators and others in the work of the Centre and the utilization of local resources will doubtless require facilities other than a single advisory body. However, it is hoped that through the efforts of the many people involved a working structure will gradually emerge that is capable of ensuring maximum benefit to the area.

The Centre's staff has moved slowly, in an attempt to become thoroughly familiar with the needs of the area before developing specific objectives. Its first and most important task has been to meet and talk with as many key people as possible in order to outline the major purpose of the Centre and to acquire knowledge of the school systems, agencies, and communities in the region. This is happening more quickly than was anticipated. The number of requests for assistance of various kinds has been quite amazing; the staff of the Centre have already participated in a number of workshops and responded to many individual requests for information and assistance.

So far, meetings have been held with officials from the regional office of the Department of Education and from most of the region's school boards. Similar meetings have been held with people from Lakehead University and agencies such as the Social Planning Council and Town Talk – a group of young people with National Film Board backing who are attempting to strengthen regional communications through community television.

Although its major role will emerge slowly and over a period of time, there is already some indication of how the Centre can facilitate communication between OISE and the vast area of northwestern Ontario.

The need to interpret the northwest region to the Institute is very real. By working through the Northwestern Centre, OISE personnel may become aware of the region's great potential for research activity and of the need to adopt strategies suited to this environment. In pursuing this task, the Centre has been fortunate in receiving the help and cooperation of the regional office of the Department of Education.

The corollary of the need for the OISE staff to learn more about the northwest is the need for educators in the northwest to learn more about the Institute and its work. One of the major responsibilities of a field centre is to disseminate the results of research. It also has a duty to provide teachers and administrators with the opportunity to examine a variety of viable alternatives in the light of local needs. The establishment of the Northwest Centre means that people in this region can avail themselves of the products and resources of OISE through direct contact with the Centre's staff.

In this part of the province, a very real need exists for research on a wide variety of topics. The divisional boards have personnel with a considerable capability for carrying out much of that research, but none have a central research office to facilitate teacher-initiated projects. Northwestern Centre may well be able to assist in filling this need to stimulate, encourage, and supplement research at the local level.

Finally, community acceptance of the Centre, and through it, the Institute, is largely dependent on the ability of the Centre's staff to make their skills and interests available to the region. Here in the northwest, we are participating in activities involving guidance and counseling, second-language teaching, Indian education, teacher development, and administration. This work will doubtless influence the kind of community support that the Centre receives in terms of major projects in the future. Perhaps through involvement with centre-based research projects, local research-oriented personnel can be developed and a wider use of research findings may result.

Northwestern Centre, OISE
Central School Resource Centre
10 South Algoma Street
Thunder Bay 'P,' Ontario

Midnorthern Centre, *J. Nicholas*

Geographically, the area served by the Midnorthern Centre is enormous. Furthermore, the population pattern differs considerably from that of the south. In two cities – Sault Ste. Marie to the west and Sudbury to the east – are boards of education which together serve three-quarters of the students in the region's schools. Strung between these two urban areas, about two hundred miles apart, are smaller nuclei of education with their own boards of education. To the northwest of the OISE Centre in Sudbury (three hundred miles as the goose flies) is Hornepayne, with a school population of about 700; between Sault Ste. Marie and Hornepayne is the Michipocoten Board, with about 1500; while in the middle of the midnorthern region is Chapleau, with about 1000.

In addition to the problems created by the vastness of the area and the di-polar urban concentration of schools is the diversity of the population the Centre serves. A large proportion of the children attending schools in the region come from French-speaking backgrounds. Then, on Manitoulin Island live 3000 members of the Ojibway tribe, which is one of the densest concentrations of Indian people in Canada outside the Six Nations Reserve. One thousand children from the tribe are in schools run by the Indian Affairs Branch; another 230 attend Manitoulin High School, where the total enrollment is some 800.

Distance alone suggests the need to devise a pattern of community involvement differing from that adopted by centres in southern Ontario. The very diverse nature of the problems that have already been brought to us also suggests that the Centre should seek to achieve this through something other than an advisory committee of the all-embracing umbrella type. So far, discussion with educational leaders in the area has suggested that there should be coordinating committees, a regional council, and project committees, each with defined functions and relations one to the other, to the schools, to the community, and to the Institute through the Centre.

Coordinating Committees – These standing committees would be drawn partly from geographical areas that have some common identity. One committee might be for the Sault Ste. Marie district, one for the Sudbury district, and one for the remote schools. Then the Cambrian College of Arts and Technology (with campuses at Sault Ste. Marie and Sudbury), Laurentian University, and the Sudbury Teachers' College would each, because of their special nature, have coordinating committees. Membership on the committees would be determined by those concerned with education in the individual sectors. The Sault Ste. Marie district committee might consist of, say, three school principals, two practicing classroom teachers, one representative from the community, a member of a local school board, and the head of the Midnorthern Centre. All ethnic groups would be fully represented on these committees.

Among the functions of the coordinating committees would be sensing and reporting the educational needs of the areas they represent, screening proposals originating from school people or from faculty within the Institute, suggesting suitable school populations for projects, reporting on the progress of projects, and evaluating projects with respect to the criteria required in the proposal. The coordinating committees would also submit reports to a special OISE session of the Regional Council of Directors and Superintendents of Boards of Education, which is called by the Regional Director of the Department of Education three times a year.

Regional Council: Special Session (OISE) – In addition to school board directors and superintendents, this session would also have as members representatives of Cambrian College, Laurentian University, Sudbury Teachers' College, and the head of the Midnorthern Centre. As well as receiving reports from and making suggestions to the coordinating committees, the members of this committee would, it is hoped, be able to help in disseminating project findings throughout the region.

Project Committees – The third type of committee proposed for the region is the project committee, which would focus on the improvement of learning performance in specific settings.

Membership on the project committees would depend on the nature of the projects themselves. There would certainly be school personnel involved, together with one or more members of the faculty from the Institute, including the Centre's head. Other members might include representatives of the community and school students. Individual project committees would have a stated life-span, which would depend initially on their ability to present a convincing proposal to the appropriate coordinating committee and thereafter on the reports they present to the Special Session of the Regional Council.

Ultimately, the worth of the Centre as a visible, functioning arm of the Institute responding to the needs of schools in the midnorth of the province will depend on how successfully the model described here allows access to the resources of the Institute.

Midnorthern Centre, OISE
King George Public School
P.O. Box 696
295 Victoria Street
Sudbury, Ontario

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Western Ontario Centre, ***R. H. Stinson***

This year J. A. (Sam) McKeown, formerly of the London Teachers' College, joined the Centre as Development Officer. Our accommodation, now in Broughdale Public School, is again provided by the London Board of Education.

The Centre's activities come about, for the most part, as responses to enquiries or expressions of interest from individuals or school boards in southwestern Ontario. For example, we are involved with the following staff development projects:

The Principals' Seminar – One day every other week, the principals of ten elementary schools under the London Board attend this seminar. Led by Ada Schermann, who is assisted by Professor John McInnes (both from the Institute), the seminar offers the principals assistance in the field of language development.

Leadership Teams – In the latter part of November, a one-week session was held at the Ridgetown College of Agricultural Technology for twenty-two persons who made up the teams selected by eleven school boards in southwestern Ontario. Led by Donald Graham of OISE's Department of Educational Administration, this residential workshop was concerned with the development of the human resources in organizations, decision making, and helping people to work with both individuals and groups. The project will continue in the school boards over the winter, and a second workshop for the same teams will be offered next May.

OTF Science Workshops – This year the workshops are given not only *to* teachers but *by* teachers: the latter make up the teams nominated by school boards where workshops will be held. The purpose of the teacher leadership is to assist in the development of training teams in each school board. I have assisted Don Cooper, the workshop leader, with the training sessions for leaders and am giving assistance in the three western Ontario workshops at Wingham, Windsor, and Kitchener.

In addition to the above, we are engaged in several activities oriented toward curriculum:
The French Project – This project is now

underway in a grade 1 classroom in St. Thomas, where teaching is conducted in French for three-quarters of each day. This is the first stage in our exploration of the feasibility of continuing the introduction of French in the early grades of elementary schools in the area. Overseeing this project is a widely representative committee of consultants drawn from the regional office, several school boards, London Teachers' College, and Althouse College. Sam McKeown, the Centre's development officer, plays a major role in this and in the working committee of the project. We have benefited greatly from the encouragement and advice of Dr. H. H. Stern of the Modern Language Center at the Institute.

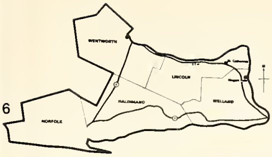
The Early School Environment Study – Sam McKeown and I are part of a resource team in this three-year study, which is being conducted by Professor Paul Park at Althouse College, under a grant from the Ford Foundation. The study seeks to determine methods by which a program of free enquiry can be encouraged in elementary schools.

Curriculum Development in English and History in Grades Seven to Ten – This project involves teachers of elementary and secondary schools in Middlesex County and staff members of Althouse College and London Teachers' College.

Some of the Centre's activities relate directly to the Institute – for example, it distributes the *Math Letter* to the schools, organizes demonstrations of such activities as the Conceptual Skills Program, and refers enquiries to experts on the Institute staff. The Centre also gives assistance in projects that originate in the region. One of these is a refresher workshop for physical education consultants and teachers from area school boards, which will be led by Martin Underwood, a noted British teacher of school gymnastics.

The program of the Centre is obviously in an early stage of development and will need to be reviewed periodically; for this it draws on the able assistance of an advisory committee, composed of eight educators from the region. It is likely that the Centre will function more effectively in some roles than in others, and we expect that these will become increasingly apparent as we gain experience in a number of regional enterprises. Much of what we do is in cooperation with other groups from all educational levels in the region, which have extended us a very cordial welcome and given us a great deal of assistance.

Western Ontario Centre, OISE
Broughdale Public School
247 Epworth Avenue
London 11, Ontario



Niagara Centre, *Floyd Robinson*

After more than a year of operation, the Niagara Centre has made headway with a number of projects, three of which are briefly outlined below.

Inquiry Training Project – In 1968/69, a limited inquiry project was conducted at McKay Senior Public School in Port Colborne, primarily in social studies and geography. A decision was then made to invite the Niagara Centre to participate in a more comprehensive program.

The object of the inquiry training program is to upgrade the problem solving and critical thinking ability of senior elementary school children by teaching them (and having them apply) the explicit models for inquiry which have been devised in our culture. In behavioral terms, our tentative goal is that grade 7 students exposed to this training should exhibit a level of sophistication in the use of such models equal to that of untrained high school graduates of comparable intelligence.

The first year (1969/70) was devoted to devising materials and teaching them to experimental classes in Port Colborne. After a successful initial experience with a grade 7 class, the materials were revised and taught to a second grade 7 class, to two grade 6 classes, and (in part) to a group of grade 4 students. Criterion tests administered in June indicated that the training had had a large effect at all grade levels.

Since most of the teaching last year was done by the experimental team itself, the major emphasis of the current year's program is to see whether classroom teachers working under normal conditions can obtain comparable results. To this end, the entire grade 7 at McKay Senior Public School (ten classes) is being taught the inquiry models by regular classroom teachers. A preliminary inservice training program was held in the early fall, and each participating teacher is being given help in teaching the models appropriate to his own subject-matter field.

A number of other schools in the Niagara region and elsewhere are trying the materials out on a limited scale. To assist them, the Centre has developed seventeen sets of teaching videotapes and related notes, together with sets of students' notes and summaries. As matters now stand, the inquiry training materials provide a self-contained course on problem solving appropriate to the grade 6 to 8 levels. It now seems likely, however, that these materials will be integrated into a more comprehensive 'thinking curriculum' spanning the K-6 levels.

The Constructive Thinking Program – This pilot project is being conducted in Christ the King School in St. Catharines with sixteen above-average grade 7 children. It is an attempt to integrate the inquiry training project with the critical thinking program initiated in Toronto last year by a team headed by Carl Bereiter of OISE. In addition to teaching the inquiry models, the constructive thinking program provides students with an opportunity to practice these models in regular classroom subjects, provides special instruction in mathematics and language, offers a weekly 'thinking seminar' which – by having students observe how people of different ages attack intellectual problems – encourages an analytical and self-critical approach to thinking as a *process,* and provides the student with an opportunity to discuss thinking problems (each student, for example, keeps a 'thinking diary') with a tutor. The objective of this program, as with the inquiry training project, is to produce a standard of intellectual performance in elementary school graduates comparable to that of high school graduates of the same innate curiosity.

Wider Public Involvement in Education Project – One major focus of our activity last year involved the use of parents in an instructional role at Maple Grove School in Vineland. A group of twenty-five parents of kindergarten children (about half of the eligible population) responded positively to an offer of assistance in tutoring their child at home. For this purpose, a parents' manual was constructed which both outlined the program at Maple Grove School and described specific teaching procedures the parents might use with their children at home. Periodically, the teacher sent home assessment forms showing where each child was in his program and what the parent might do at that stage; similarly, the parent reported back to the teacher the section of the manual she had been working with, and the results obtained.

A second project involved the use of high school volunteers as remedial instructors in the primary grades. A group of approximately sixteen volunteers (grade 12 students) were given a series of lectures on child development, the reading program in the elementary school, and diagnostic testing. This was followed by classroom observation. Each volunteer was then assigned to a particular child for the purpose of remediating some specific inadequacy in the child's reading ability.

As a third activity, the Centre did an extensive survey of the use of volunteers in the elementary schools of the Niagara region. As well as information on how volunteers are used, the report provides a detailed taxonomy of instructional tasks intended to help the school clarify which functions are appropriate for volunteers and which must be reserved for the professional teacher.

The kindergarten experiment is being repeated at Maple Grove; this year, however, special attention is being given to the kinds of criterion measures – both cognitive and affective – which are appropriate to children at this age level. One new project this year at Maple Grove involves grade 1 parents (most of whom participated in the project last year) in an effort to improve their child's written expression. The same parents have also been invited to help develop their children's problem-solving abilities by providing opportunities at home to use skills learned in a special problem-solving program offered in school. At Maple Grove School we are now also exploring the feasibility of preschool 'minigroups' staffed by mothers working under the supervision of the kindergarten teacher.

Niagara Centre, OISE
187 Geneva Street
St. Catharines, Ontario

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Trent Valley Centre, *H. H. Russell*

During the past year, the Trent Valley Centre has spent considerable time in identifying an appropriate program and the staffing needed to meet it in eastern Ontario. The first requirement, as work began, was to act as a sort of two-way channel through which the felt needs of area schools could be made known to OISE and the Institute's assistance could be made available to development projects in the schools.

When the Centre was set up, something of a ready-made facility existed in POISE (the Peterborough Operation to Individualize Student Education), which had already enlisted the support of the Institute, the Peterborough County Board, the Catholic Separate School Board, and a number of area schools in a common program of innovation. POISE provided a cornerstone for the Centre's program. It dealt with problems identified at the school level; it required the services of qualified academics both as consultants and as staff members of the ongoing program; it created potential for finding general solutions to school problems; it provided for the participation of non-OISE and non-school personnel as well as of staff members from regional universities, teachers' colleges, colleges of applied arts and technology, and offices of the Department of Education; it encouraged development of the area's academic manpower; and it provided for the development of other human resources, so that OISE could make a phased withdrawal from specific projects at appropriate times.

Among the areas of concern to the Centre that were already under study by POISE in its five core schools were the delegation of responsibility for curriculum, instruction, and decision making to the teacher; the provision of release time to teachers planning innovative programs; the use of volunteer assistants; and the study of various means by which more attention could be given to individual differences.

The work begun under POISE has moved easily into a new relationship with the Centre in what has come to be known as 'the Peterborough Project.' During this school year, the focus in the core schools has been on curriculum. Social studies is the subject of concern in two schools – one is working directly on content while the other is proceeding through a theme approach, which is now undergoing evaluation by sociologists from Trent University. The grade 4, 5, 6 mathematics program is the target in another school. New materials have been produced and tests measuring their effectiveness are now nearing completion. In the two remaining schools, the focus is on individually prescribed instruction, with mathematical games and group work on problems supplementing the highly structured basic materials.

One of the most important features of the Peterborough Project is the use of volunteer assistants to provide free time for the teachers. No one solution to the volunteer assistants problem has yet emerged. Some schools rely on parent volunteers to supply the extra manpower. Others rely on university and teachers' college students. Still others have revised their daily schedule so that planning time can be found at the end of the day.

At present, the Peterborough Project is under the executive jurisdiction of the Core Committee, consisting of the principals of the original POISE schools, and is advised by a committee entitled 'the Monitoring Committee,' consisting of parents and representatives from the staffs of the POISE schools, the county administration, the school board, the teachers' college, Trent University, the local college of applied arts and technology, labor, business, and industry. The group meets approximately twice a year to listen to presentations about the ongoing POISE programs, and acts as a 'relevance screen,' ensuring that not only the general philosophy but the detailed planning of the project is relevant to the needs of the schools in Peterborough County.

The success of the various components of the Peterborough Project has led to the idea of a diffusion model, with the original POISE schools as the nucleus. A second group of principals, known as the Study Group, has now been organized to carry out the first diffusion phase, which may involve a large number of schools in Peterborough County. It is hoped that this process will eventually be extended to many schools in other counties in the region.

The success of the proposed diffusion activities depends on there being manpower available to evaluate each component of the project within the five core schools, as well as to study the original components with a view to implementing the more robust ideas in other schools nearby. The acquisition by the Centre of a professional evaluation specialist, Dr. K. A. Leithwood, has resolved part of the manpower problem, and the willingness of the Study Group principals and staff to embark on POISE-like innovative activities has resolved the problem of attracting the attention of potential target schools.

One service function that has been established in the Trent Valley Centre and has been offered to the various parts of the region is essentially an extension of the OISE library service to educators within the region.

Trent Valley Centre, OISE
R.R. #3
Peterborough, Ontario

A JOURNEY TO ITALY

As told to Jean Trott
(Department of Curriculum, OISE)
and John Colombo
(editor of Tamarack Review*)*
by Bonnie Simonato, who was then with
Twentieth Street School, Etobicoke

The suggestion that we 'visit' Italy came from the students themselves. The combined grade 5 and 6 class wanted very much to undertake a big project but had no specific ideas as to form or content.

Then someone remembered that last year the class had enjoyed doing Japan, so we decided that the students would do another country – Italy. The Japanese project had been largely an exercise in research, with the children spending much of their time reading reference books in the library. This year they wanted to adopt a more exciting plan.

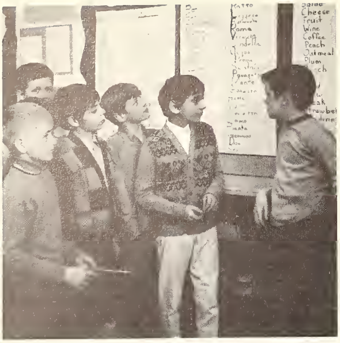
I quizzed the children for some time about the kinds of activities we might undertake for our study, and two student secretaries listed the suggestions on the blackboard. Since none of the thirty-eight students came from Italy and only two had Italian ancestry, we had no easy source of information. We had to look everything up. Under research topics we listed population, climate, geography, cities, homes, food, and clothing. Enthusiasm developed slowly until a suggestion came from an unexpected quarter.

A student who usually contributed little to the class said, 'Maybe we could have something that we could invite our parents to come and see.' His suggestion struck the right chord. But what could we do? This was a rare moment for the students; everyone began to contribute suggestions as to what parents might like to see. The list on the blackboard was rearranged, and planning for displays relating to Italian life today got underway immediately.

Groups were formed to prepare posters, charts, and displays. A large mural was planned, and students busied themselves with reference books in a search for aspects of Italian life to include in their illustrations. If we invited parents to come, the children felt that we should offer them something Italian to eat, and a restaurant entered our thinking.

Suddenly everyone was very busy. As the days passed and projects were completed, the students immediately moved on to others. Sometimes the atmosphere was hectic, but I managed to work in formal arithmetic lessons related, in one way or another, to Italian civilization. The children's enthusiasm was boundless. The only way I could get them to take a break was by telling them that I was tired and needed a rest. Then we would draw the blinds for a short time and sit quietly while I read poetry aloud.

One student made the imaginative suggestion that everyone prepare a family shield, and the children set to work. Little information on Italian shields and



crests appeared in the reference books in our library so we adapted old English heraldic devices to our purpose. Thirty-eight shields were prepared and hung in the classroom, giving it a European touch. Our decorations also included posters, one of which featured famous Italians. On it the students presented a strange trio of 'representative Italians' – Leonardo da Vinci, Michelangelo, and Benito Mussolini. A map of Italy was displayed, and a vocabulary chart with the heading 'Why Not Learn Some Italian Words?' Preparing the chart was fun and provided the students with their first experience in the use of a bilingual dictionary.

Rome, Venice, and Milan were studied in some depth, and pictures and drawings of the three cities filled one poster. One of the Italian students, whose grandfather had recently visited Italy, brought some Italian coins for the children to examine and display. This led to the preparation of a chart showing the purchasing power of the lira. For the three-week period of preparation, the athletic activities of the class consisted of an attempt to master soccer, which is Italy's most popular game.

Work in their classroom did not satisfy the students. They wanted to explore the Italian community outside. Our school is close to a small group of shops owned by Italians, and the principal and I visited five of them and got permission for the class to visit in small escorted groups. In addition, the principal arranged with the neighboring high school for three Italian-speaking youths to serve as guides and interpreters on these expeditions.

The students were divided into three groups, and each group selected two stores they would like to visit from a shoemaker's shop, a variety store, a fruit and vegetable market, a meat market, and a bakery. The owners were cooperative and seemed overjoyed at the interest of these non-Italian students. Questions had been prepared in advance, but the children bubbled over with their own observations. No unfortunate incidents occurred to mar the visits. Visitors to the butcher's shop received a special treat – the butcher surprised them with a gift of three rings of Italian salami. The children brought it back to the classroom, where it was admired by their classmates, and then divided up so that all could have a taste. Another poster for Italian Day came into being as they entered their reaction to the salami on a display sheet. Typical comments were: 'It's hot!' 'I like it.' 'I don't like it.' 'It tastes like pizza.'

For most of the students, the highlight of our preparations was the visit of Signor Caliguriri. In an effort to broaden the scope of our planning, I got in touch with the Italian groups listed in the telephone directory – consulates and tourist offices – and the most helpful proved to be Alitalia, the airline people. My call was referred to Signor Caliguriri, who was in charge of arranging charter flights. At first he thought I wanted to send the class to Rome for a few days and was all set to arrange it. Fortunately, the discovery that our trip was only make-believe did not dampen his enthusiasm. He came to see us twice and contributed a very great deal to our project.

Signor Caliguriri proved to be a superb teacher and charmed everyone with his discussions of Italian life and civilization. He answered questions in detail, described trans-Atlantic air travel, and gave instruction in the pronunciation and spelling of a few Italian words and phrases. On seeing pictures of Sophia Loren's villa, he spoke of visiting the actress and delighted the children with a description of the interior of her home. To enlarge our program for Italian Day, he brought movies of Italy for the children to show to their guests.

Signor Caliguriri contributed to the project in another way. The children were determined to have an Italian restaurant, but plans for it were not going ahead. On impulse, they asked him for the name of a good dining place in Rome. His reply – 'Villa dei Cesari' – gave our restaurant a name and, with it, reality.

The following invitation was sent to the parents of the children in our class:

Come! Learn All About Italy!
Enjoy Some Italian Food!
Thursday, March 19, 1970
1:30 - 4:30

When the day came, thirty mothers and fathers visited us – an impressive number since many of them work during the day and had to make sacrifices in order to come. Our guest list also included the superintendent, the inspector, and other teachers and students who decided to see what all 'the Italian business' was about. At the close of the day, the children counted seventy-six signatures in the guest book.

As they arrived, the guests had a preview of what was in store for them. The cloakroom was decorated with an Italian flag, a reproduction of the Mona Lisa, and a large mural of Venice, complete with fountains and gondolas. Inside the classroom, the children served as guides. Of course, each child wanted to show his parents around. To make the occasion easier for children whose parents could not be with us, duties were assigned to keep them busy throughout the afternoon.

The 'grand tour' took about twenty minutes. There were many pictures and drawings to be examined, as well as a number of copies of Italian-language newspapers provided by their publishers. Needless to say, the pictures of Sophia Loren's villa attracted much attention and the parents were surprised to hear the children's vivid descriptions of its interior.

Since our Villa dei Cesari could seat only eight persons, I had to ensure that guests came in a steady stream and vacant places were filled without delay so that everyone could be served. A maître d' in white shirt and black tie presided over the Villa, seated guests, and distributed the hand-printed menus. The food had been carefully chosen. Bread sticks, cheese, and olives preceded the main course of lasagna, prepared by the mothers of the two Italian students. Grape juice served as wine, and cenci alla Fiorentina (deep-fried sweet pastry) and espresso completed the meal. The pastry was very popular, and requests for the recipe were so numerous that the children had to mimeograph it for distribution. Taped accordion music and the poster record of the students' reaction to the Italian salami entertained our guests while they dined.

After their meal, the guests were invited to a neighboring room to see Signor Caliguriri's movies. Many of them stayed for the whole showing.

The parents expressed amazement at the effort and imagination that had gone into the project. Throughout the day, many of them told me that they had never seen children so captivated by a school activity. For weeks, it seemed, they had talked of nothing but Italy. Some of the children told me later that their parents were surprised that the project was carried on in school hours – a sentiment, I might add, that some of my colleagues shared! Before leaving, the parents were asked to complete an evaluation sheet and deposit it, unsigned, in a box. The sheet contained the following questions:
1. Which display did you like best, and why?
2. As a parent, would you say this was a worthwhile learning experience?
3. Would you patronize our restaurant again, and if not, why not?
Our guests were very complimentary in their comments, and reading the replies the next day in class was a rewarding experience for everyone.

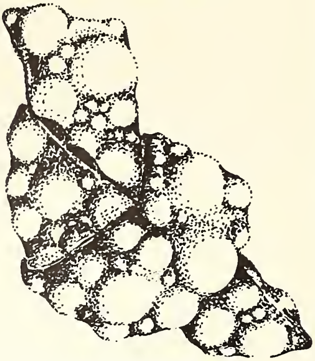
The children's enthusiasm lasted to the end of the day. All of them remained after class voluntarily to help with the cleaning up. The work was done well and cheerfully, although, I must confess, with considerable noise.

One task remained for the students – their own evaluation of the day. The wish they expressed to 'do another country the same way' really told the story of how they felt. Comments about their performance, however, showed that they were very critical of themselves and very anxious to have everything letter-perfect for their parents. In reply to a query about what they liked best and least about the project, they stated that they enjoyed most the freedom to choose the project and allocate the various activities and disliked most the painstaking efforts required to produce the posters and displays. A request for suggestions as to how we might improve upon the day brought forth very critical and perceptive responses. Generally speaking, the children expressed a need for more facts and a desire to find a variety of interesting ways of presenting them.

We all agreed that our 'visit' to Italy was a success, and I think it will remain with the students for a long time. I know that I shall certainly not forget it.

CENCI ALLA FIORENTINA

(Deep-Fried Sweet Pastry)



2¼ cups all purpose-flour
2 whole eggs
2 egg yolks
2 tablespoons rum
confectioners' sugar
⅛ teaspoon salt
vegetable oil or shortening
for deep frying

Place 2 cups of the flour in a large bowl, make a well in the center and add the eggs, egg yolks, rum, 1 tablespoon confectioners' sugar, and salt. Using your hands or a fork, mix until all the flour has been incorporated and you can gather the dough into a rough ball. Sprinkle the remaining ¼ cup of flour on a board of pastry cloth and knead for 10 minutes until the extra flour is worked in and the dough is smooth and shiny. Refrigerate for at least 1 hour. Heat 3 or 4 inches of oil or shortening to 350° in a deep-fryer or large heavy saucepan. On a floured board of pastry cloth, roll out one-fourth of the dough at a time. When paper-thin, cut the dough with a pastry wheel or sharp knife into strips 6 or 7 inches long and ½ inch wide. Tie the strips into loose knots and deep-fry them, 4 or 5 at a time, for 1 or 2 minutes or until they are golden brown. With tongs or a slotted spoon, transfer the cenci to paper towels to drain. Repeat with the rest of the dough. Just before serving, sprinkle the cenci with confectioners' sugar.

Makes about 4 dozen.

Vers un enseignement plus intégré

Lucie Beauchamp, f.d.l.s.

Responsable du cours d'été tenu à Hawkesbury en 1970 sur les méthodes d'intégration dans l'enseignement

'A un monde qui évolue sans cesse doit correspondre un enseignement constamment soucieux de s'adapter' (Gaston Berger).

L'auteur démontre comment on peut utiliser l'arbre comme thème de départ pour certaines études en géographie, en histoire, en arithmétique, etc.

Nous sommes destinés au progrès. On assiste à une croissance extrêmement rapide du savoir humain. Nul ne peut prédire quelles sont les notions que l'on considérera essentielles dans vingt ans. Comment enseignera-t-on demain? Question que les professeurs se posent avec un peu d'inquiétude devant toutes les innovations apportées à l'enseignement. 'Il faut se transformer sans cesse pour être toujours adapté' (Gaston Berger). Afin de s'éclairer, de se renseigner sur les nouvelles tendances en éducation, de se maintenir au niveau des découvertes, soixante et un professeurs se sont inscrits au cours d'été 1970 tenu à Hawkesbury. Intitulé 'L'intégration dans les matières scolaires,' ce cours était offert pour la première fois en français par le ministère de l'éducation.

Quelle image se faire au juste de ce cours? Les études intégrées n'offrent pas une nouvelle méthode aux professeurs mais bien plutôt une nouvelle façon de présenter et de faire vivre les différentes disciplines du programme d'étude. 'Vivre d'abord, et apprendre par la vie dans la vie,' disait John Dewey. Intégrer est plus ou moins rassembler une série d'idées se rapportant à un même centre d'intérêt de façon à en faire une unité, un tout. L'intégration polarise les expériences vécues autour d'un thème ou d'un centre d'intérêt. Il s'agit donc de coordonner les différentes disciplines en liant par un prolongement une activité mathématique à une activité scientifique ou en faisant suivre une activité scientifique par une activité géographique, par exemple.

Il en est de l'intégration comme d'une chaîne. Dans la chaîne, chaque anneau se relie au précédent pour former un tout. Toutefois chaque anneau est complet en lui-même et peut même se séparer pour former une autre unité. Il en est de même dans l'intégration. Ainsi, une leçon sur le transport peut facilement se prolonger pour devenir une leçon de mathématique, de géographie, de composition, etc. Toutefois, comme dans la chaîne, chacune des matières conserve ses qualités et ses valeurs propres. On fait ressortir les qualités générales qui les lient toutes dans un même processus: le processus de l'éducation. Faire de la mathématique, de la science, ou de la géographie, c'est tout d'abord vivre, connaître les choses, établir des relations entre elles, faire des comparaisons en distinguant ce qui les associe ou les différencie. Cela signifie que nous croyons au décloisonnement des disciplines et à l'enseignement par la découverte. Au lieu d'isoler chaque discipline, de juxtaposer des cours, n'est-il pas préférable d'en faire un ensemble? Ce genre d'enseignement n'impose à l'élève aucun rythme d'acquisition. C'est en fonction de ses aptitudes intellectuelles qu'il progresse. De plus, si l'élève est particulièrement doué pour une discipline ou encore s'il se montre plus vivement intéressé à une matière particulière, il pourra avancer librement dans cette voie sans avoir à attendre que le reste de la classe atteigne le même stade que lui. Ici le travail peut s'accomplir en groupe ou seul, d'après le choix des étudiants ou du professeur. Il faut aussi une atmosphère de détente et de joie dans la classe. Le bruit de la classe pourrait bien nous agacer un peu au début, mais on s'y habitue. Il faut toutefois s'assurer que l'élève ne perd pas son temps, et même s'il parle et rit c'est pour mieux s'expliquer, pour mieux communiquer.

Durant tout le mois de juillet, l'école Paul VI de Hawkesbury s'est transformée en un véritable chantier. Les professeurs-étudiants ne se sont pas lassés de chercher, de réaliser, d'expérimenter, de connaître. Cela a permis de vivre l'expérience qui pourrait être vécue par les élèves. Le cours, divisé en trois zones – étude du milieu, communications, enseignement thématique – et intercalé par deux semaines d'options, se basait sur le Rapport Hall-Dennis. Notre premier conférencier a insisté sur le besoin d'établir les objectifs avant de se lancer dans un tel programme. Le but n'est pas de tout intégrer ou de vouloir faire de l'intégration cinq heures par jour et cinq jours par semaine. L'objectif primordial est d'éveiller chez les élèves un esprit curieux, créateur, capable de penser, de formuler des hypothèses, d'imaginer, de trouver des solutions, et de tirer des conclusions. En effet, nos élèves devront vivre dans un monde de changements rapides et il leur faudra s'habituer à réfléchir vite et à s'adapter promptement à de nouvelles situations.

Ce cours sur l'intégration dans les matières du programme scolaire a donc été très intéressant parce qu'il a été actif, dynamique, et nouveau. Il répond aux besoins de l'heure. Il nous convie à des carrefours de connaissances. 'Les diverses sciences s'entremêlent et rendent caduques les classifications nettes apprises au cours de nos études. Les disciplines se mélangent, opèrent en commun, se développent l'une par l'autre et s'enrichissent toutes au contact des voisines' (Louis Armand). Il faut donc mettre tous ses talents et ses forces d'imagination, de créativité, d'initiative, au service d'une jeunesse avide. 'Alors peut-être aussi, écrivait Gaston Berger, retrouverons-nous cet enseignement dont rêvent les professeurs, qui ne serait pas fait pour l'ennui, pour l'accablement, pour la répétition, mais pour la nouveauté, pour l'invention et pour cette chose . . . qui s'appelle la joie.' Nous pourrons avec nos élèves avoir la satisfaction d'apprendre, le plaisir de créer, et la joie de vivre pleinement.

Reading Efficiently and Thinking Critically

Robbie Case and Cathy Fry
Department of Applied Psychology/OISE

Over the past year, the authors of this article have developed and tried out a classroom program intended to improve students' skills in reading and thinking. Framed as a set of activities in which the students can both compete with others and work at their own pace, the program has proved highly successful in the one class in which it has so far been tested.

Most students, regardless of their current success in school, could benefit from the development of more efficient reading skills.

Some are *poor* readers. By this we mean they have difficulty with the mechanics of reading (for example, with word-attack skills) and require special remedial help to overcome their problem. Others are merely *inefficient* readers. While they have no difficulties with reading at the mechanical level, they read very slowly, unselectively, and in most cases with poor comprehension. It is for this second group of students – the inefficient readers – that our program has been developed.

The first part of the program, improving general reading efficiency, is designed to help students read more quickly and extract the information they desire with minimum effort. The second part of the program, improving critical thinking, is designed to help students use logic and analysis rather than haste and emotion when criticizing what they read and hear. Many secondary school students (and adults, for that matter) seem to have difficulty in making objective evaluations. They cannot separate value judgments from statements of fact and they cannot determine whether the information an author presents actually proves what he is asserting. The materials in this part of the program are intended for use by students with a wide range of academic abilities and backgrounds.

Taken as a whole, the program emphasizes skills that are useful both inside and outside of the classroom.

Improving General Reading Efficiency

Speed-reading exercises on controlled reading machines. Flexible groups of four or five students read printed passages projected by machines which control the rate at which the material is presented. If a student scores 70 percent or better on the ten multiple-choice comprehension questions which follow each passage, he is permitted to begin working with the machine set at the next highest speed.

This activity is not expected to have much direct value in everyday reading situations. However, it does develop the student's confidence that he can cover material at uncomfortably fast rates and still grasp its meaning.

Skimming and scanning exercises. There are several variations of this activity, which is intended to help the student develop strategies for extracting the main points from a piece of written material without studying every sentence.

Initially, the students work in pairs. One member of the pair underlines what he thinks is important in a 1200- to 1500-word story; the other then reads the underlined parts and tries to answer a question about the story. If he fails to answer the question correctly, both students review the story to see if the necessary information has been underlined.

Later, the students work individually. After some practice in underlining, together with discussion about where important information is often located, the students scan other stories and either answer comprehensive questions or write single-paragraph outlines of the stories.

When the students have become proficient at this, they try skimming books (150 to 200 pages) and writing brief summaries during the forty-minute class period. As a result of the confidence they gain in working with controlled reading machines and the scanning strategies they acquire by skimming through short stories, they soon learn how to pick out the main points from an article, or even a book, in a very short time.

Information search. The purpose of this activity is to teach the students how to use such aids as the table of contents and the index to find *specific* information quickly.

A series of specific questions (and answers) is prepared. The students select questions and try to locate the answers by referring to a shelf of 'source' material – textbooks, magazines, newspapers, and even mystery stories. Each student keeps a record of how long it takes him to find the answer and works to decrease this time.

Experience shows that students improve rapidly in this activity and need relatively little practice.

Improving Critical Thinking

This part of the course begins with practice at considering alternatives other than those which the author or speaker has suggested. The teacher presents a 'fact' and a conclusion which an author has drawn from this fact. When the students have discussed the conclusion, they are asked to suggest a number of alternative conclusions which might have been drawn. They then break into pairs and do a similar exercise with written material. Finally, each student moves to a series of abbreviated 'fact/conclusion' arguments which he handles himself. The object remains the same – not to attack the argument but simply to come up with an alternative conclusion.

When the students have become

accustomed to thinking of alternative explanations and conclusions, the course concentrates on how various alternative explanations can be tested. Concrete experimental situations are presented from the physical sciences, and hypothetical experimental situations from the biological and social sciences. In each example, emphasis is on the method of proof that may be employed and on the faults an alert critic must look for.

After considering criticism in academic areas as diverse as physics and history, the course moves on to consider everyday arguments: how to extract the main assertions from them, and how to apply the same critical skills.

The final part of the course considers logical and mathematical criticism and criticism where value assumptions are hidden but very important. However, no evaluation of this final part of the course has yet been made and further development of it is still being undertaken.

A Game Improving Skills in Both Areas

A verbal detective game offers the students practice in most of the skills they have been learning in the program. First, the students are given a short time to read lengthy descriptions of each of four possible suspects in a murder case. They are then given a series of clues, each of which eliminates either one of the four suspects or one of the four possible motives. The clues have to be read carefully so that the students can decide which suspect or motive (if any) is eliminated by each particular clue. Periodically, the students are given opportunities to review the descriptions of the suspects in order to consolidate their argument. However, the time for review is even shorter than the original time for reading, and requires that the student know what *specific* piece of information he is looking for.

When a student is ready, he presents his case – naming the murderer and the motive. The other students act as 'defense attorneys,' pointing out false or unsupported arguments that the 'prosecutor' is using. The game ends when one student can support his case in such a way that the others cannot refute it.

This game is not played until near the end of the course so that the students have an opportunity to develop beforehand some of the prerequisite skills. In the game they are required to utilize both their general reading efficiency and critical thinking skills.

Evaluation of the Program

During the 1969/70 school year, fourteen students from two regular grade 9 English classes in the Borough of York were selected to take part in the program. The students had scored below the fiftieth percentile on the Nelson-Denny Reading Test (Form A), and their teachers felt they would benefit from taking the program. The group included students from both the four-year and the five-year English option.

After the English and guidance personnel had selected the students to participate in the program, comparison students were matched with them so that their relative progress could be evaluated. The comparison students received instruction in regular English classes.

Two tests were used to evaluate the effectiveness of the program: the Nelson-Denny Reading Test (Forms A and B), which was used to evaluate progress in general reading efficiency, and a critical thinking test, which was used to evaluate progress in critical reading or thinking.

The grade-equivalent scores of the students who participated in the program showed an improvement of 3.5 years on the comprehension part of the Nelson-Denny Reading Test, while the scores of the comparison students showed an improvement of only 0.7 years.

On the critical thinking test the scores of the students participating in the program were again significantly higher than those of the comparison students. In fact, only the three highest scores of the comparison students and the two lowest scores of the students participating in the program overlapped.

Although this was only a preliminary evaluation, results do suggest that the goals of the program were met. There was significant improvement in the students' ability to read efficiently and to think critically.

Any teachers who are interested in trying out the critical thinking part of the program or in implementing a similar reading program should write to the authors, at OISE, for further information.

**The
Editor
of Orbit welcomes
letters and articles from
teachers and other professional
educators. A small honorarium is usually
paid for articles accepted
for publication.**

The School Child as Go-between

Robert Trueman
Topcliff Public School/North York

Each year, school boards, schools, and teachers face the need to communicate effectively with the parents in the community. By and large, written communications are used – newsletters, pamphlets, and letters – and their delivery is entrusted to the pupils. This procedure generally seems to work well, and the delivery service is free, direct, and always available. There is, however, one area of concern: How efficient is it? Last year, at Topcliff Public School in North York, a group of teachers, pupils, and parents took part in a survey we hoped would answer this question.

First, we selected the pupils to participate in our survey – five boys and five girls from one class at each level from kindergarten to grade 6, or seventy children in all. As the community included high-, middle-, and low-income families, they represented a fair cross-section in terms of socioeconomic background. To ensure that no pressures were exerted on the children and that their performance would be completely normal, they were not told of their involvement in the survey, nor were their teachers.

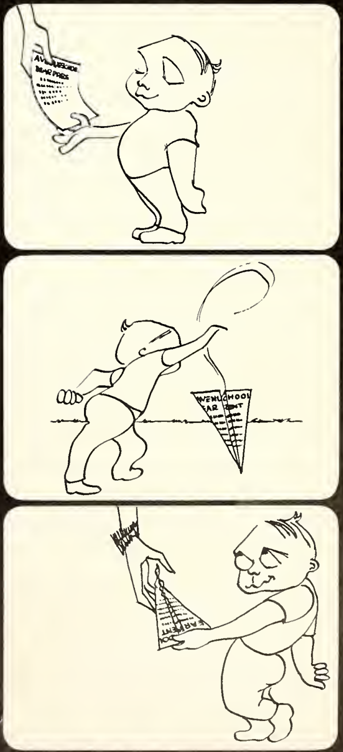
The second step was to enlist the cooperation of the children's parents, who were sent a letter in the mail asking them to participate in the survey by recording on the form enclosed every communication their child brought them from school. They were also asked not to let the child know of their participation.

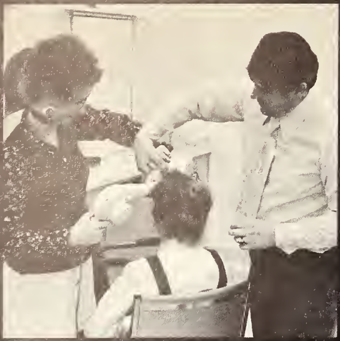
The survey extended over the four-month period from mid-November to mid-March. During that time, the parents were asked to enter on the form that had been sent them the item received, the date on which they received it, and the care with which they had read it. As the school also kept a record of the dates on which the items had been distributed for delivery, the dates on the parents' forms indicated the length of time it took the child to deliver the message.

An attempt was also made to find out just how long it took the teacher to give the items to the pupils for delivery. Each participating teacher was timed on two separate occasions and the average obtained was taken as a reasonable assessment. In this case, the time ranged from almost two hours in kindergarten to almost nil in grade 6, with most teachers averaging about 45 minutes over the four-month period.

At the end of the survey in mid-March, thirty-one of the parents returned their record forms. Although the number of returns was too small to provide conclusive findings, evidence suggested that the younger the child, the more reliable his performance. The percentage of successful deliveries varied from a high of 74 in grade 1 to a low of 34 in grade 6. Girls tended to be about 6 percent more reliable than boys as messengers; but, strangely enough, the parents of boys scored 9 percent higher than the parents of girls in submitting returns. For the most part, the children delivered messages on the date of distribution .Their parents tended to read carefully all items relating directly to school, but they read only cursorily announcements of events and recreational activities not sponsored by the school. In the opinion of the parents, their children were reliable messengers.

Two useful facts emerged from the survey. First, if a child is to perform well, he must understand that he is an essential and formally established link between home and school and that successful communication depends on him. Second, he should be required to deliver only material that relates directly to the operation of the school. The importance of the task will be very real to him if he knows that his parents value the material he delivers. It is scarcely necessary to add that by limiting the material for distribution to items that deal directly with the operation of the school, the whole problem of school-to-home communication would be minimized.





Profile of a School 8

Kawartha Lakes School, Lindsay

Kawartha Lakes School on the outskirts of Lindsay is one of the fourteen training schools in Ontario operated by the province's Department of Correctional Services. Officially opened in 1962, this school is designed to accommodate up to 120 girls, ranging in age from fourteen to sixteen, who have been admitted by the Provincial Courts (Family Division) under the provisions of the Training Schools Act, 1965. The overall administration of the school is the direct responsibility of the Superintendent.

The educational program comes under the supervision of a head teacher, John Baldry, who is assisted by five female and five male teachers, all of whom are fully qualified. To ensure that standards in the school are comparable to those in the community schools, officials from the Ontario Department of Education visit the school regularly on a consultative basis and Department of Education curricula are used throughout.

The educational emphasis at Kawartha is on the Arts and Sciences and Business and Commerce programs. However, additional courses in vocational training, such as hairdressing and business practice, have been integrated with the academic program, as it has been found that this reduces considerably the number of girls who fail to continue their education upon their return to the community. John Baldry's central aim in providing this program is to help the girls to achieve grade 10 standing and combine this with a marketable skill.

Individual timetabling was introduced into the school some years ago, and the girls in grades 9 and 10 are given a wide choice of options, which include courses in film-making, creative English, and library work, to mention only a few. This type of innovative programming has encouraged many girls to continue their education beyond the grade 10 level after leaving Kawartha. Furthermore, several girls presently at the school are enrolled in the local high school, where they are taking courses beyond the grade 10 level.

In John Baldry's experience, the girls respond well when they are actively engaged in meaningful programs after regular school hours. A number of girls assist the staff of a children's hospital on a part-time basis. Others serve as teachers' aides at a school for retarded children.

The goals set for the girls in this school are often short-term ones, reinforced by rewards for good performance. These rewards take many forms, including special excursions of either a recreational or educational nature. But as Baldry points out, 'No program can hope to succeed in a school of this type without a strong emotional rapport between the staff and the students' – 'It is my belief,' he adds, 'that many of our girls would never be here if some teacher had taken a deep interest in them.' The staff at Kawartha devote hours of their own time to the girls' well-being, and most of the girls leave much happier and better adjusted than when they arrived.

'We want to provide each of them with a "success" experience,' says John Baldry. A success experience is a good description of his school.